

Project: Back Turner Street, Manchester.

Document: TfGM cable stay building fixings

Revision: 1

Date: February 2022



Contents

1.	Planning condition	
2.	Design constraints and pole replacement fixing	

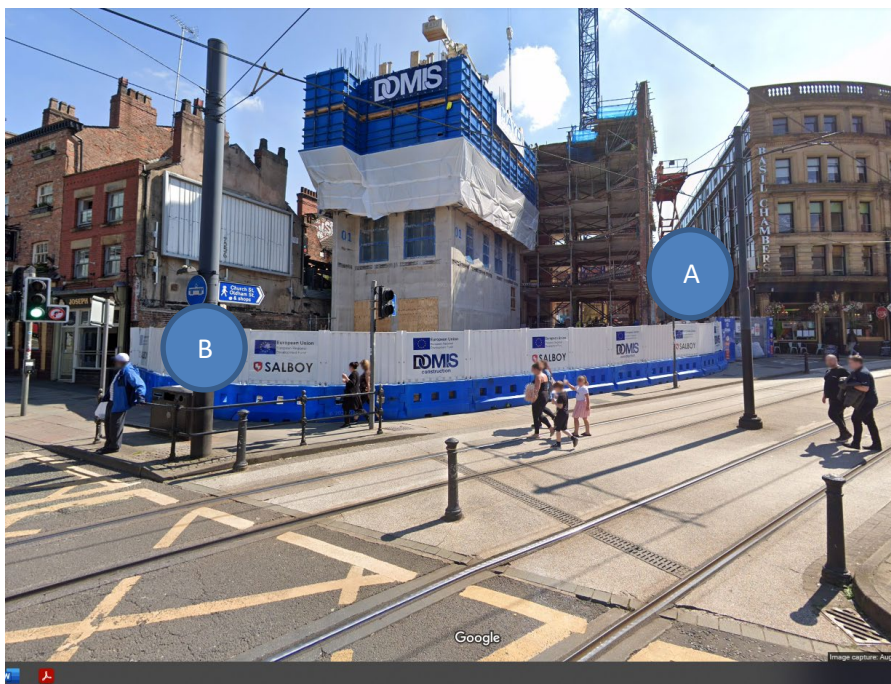
1.0 Planning Condition

Condition 30 – Overhead Wire Fixing

“A scheme for the provision of overhead building fixings to replace the overhead line fixing has been submitted to and approved..”

The sentiment behind this planning condition is, where possible, overhead cable poles are removed and replaced with cable stays fixed back to buildings to declutter the streets and pedestrian footpaths across the City.

On the Back Turner Street development there are two cable posts within the red line planning demise, one of which is circa 5m away from Block B (Pole A) and one that is 9.2m away from Block A (Pole B)



To allow the planning condition to be closed out, Domis have to engage with an approved TfGM design and installation organisation called Podtrak. This has taken place, and designs have taken a very long time to come through for the pole stay building fixing. These will be issued to TfGM for their final approval once completed designs have been received.

2.0 Design constraints and overhead fixing.

Within the Back Turner Street development there are a variety of façade treatments; Block A being a unitised double glazed façade system, Block B being a retained façade to two elevations with solid cladding or brickwork to the two elevations where the façade isn't retained, Block C the furthest block from the TfGM asset is mainly a brick and glass building.

As can be seen around Manchester along the tram network, a variety of stay fixings are connected back to buildings, always to an area which is of a solid construction and not glass. The design for

the Podtrak fixing is for the cables to be fixed back to the concrete slabs due to the loads, which would mean the metal cable would be going directly through the glass. This isn't a sensible approach; it wouldn't be recommended and isn't compatible with the tested unitised system selected to provide the concept shown within the planning approved façade design.

To this end, the solution for the Back Turner Street development is to remove Pole A and provide a building fixing within Block B solid façade. On Block A the pole will have to remain as the building fixing isn't possible due to the cable not being able to go through glass. Pole B is in the widest part of the footpath and when the development is complete the distance between this pole and the building line is 9.2m

Date: 07.12.21

Plan view of CC53A

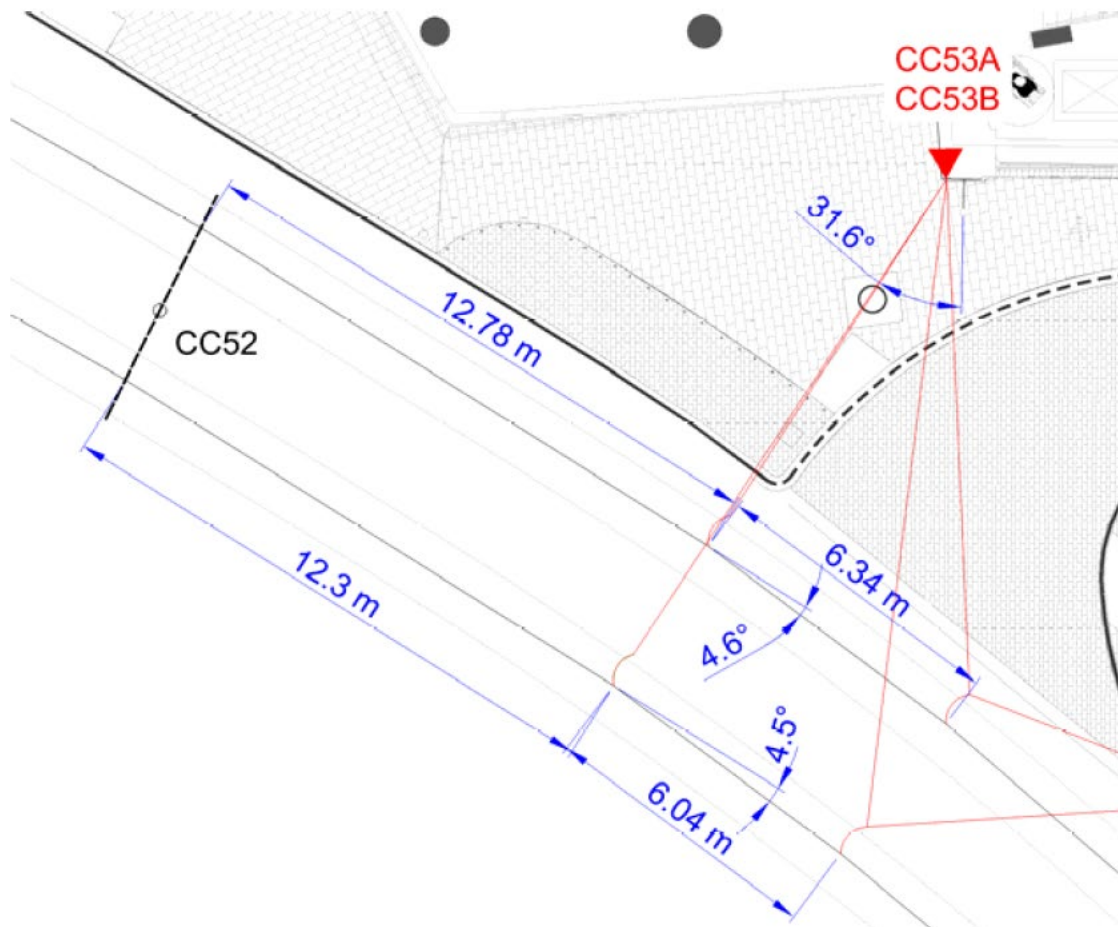


Figure 2: Extract of Pod-Trak plan view from design calculations for Pole A building fixing replacement.