

Location: C422 – Tottenham Court Road (TCR)

Date of Incident: 26th September 2018

What Happened :

At Dean Street a sub-contractor J. Murphy & Sons (Murphy) was carrying out an excavation to install a new carrier drain for the Urban Realm renewal works when a “T” spur became detached from a low pressure gas main at 09:37. The Murphy’s operative managed to partly plug the leak with clay which prevented a substantial loss of gas. The TCR site and offices were evacuated at 09:50 along with local businesses with a section of Dean Street closed as the London Fire Brigade attended the site. Gas specialist contractor engineers arrived on site at 11:00 and the repair team arrived at 12:55 with the repair completed at 13:20. Gas detection checks on adjacent properties and the TCR site were complete by 14:05 when the all clear was given.

Findings :

1. Utility service and for Laing O’Rourke drawings were not accurate and the initial hand-digging was undertaken. The unknown end-capped gas service should have been terminated at the gas main in line with best practice.
2. Design and management issues regarding a Technical Query (TQ) requiring an installation of a 1.2m manhole in-between the services. The subcontractor was tasked with finding a suitable position and an excavator was used.
3. An excavation with mechanical means within 500mm of any exposed service was felt to be acceptable and the team did not perceive the risk which this may pose.
4. The plant operator was dragging the spoil from the exploratory excavation over the previously exposed services when the end-cap gas section was struck with the excavator bucket causing the detachment.

Actions and Learnings :

1. Daily reviews will be undertaken prior to the Permit to Break Ground activity supported by Murphy’s Construction Manager for each individual area and the form/procedure to be fully briefed to all operatives. This will be monitored by site management to ensure compliance and the 500mm plant exclusion zone is adhered to.
2. All design changes and future excavations will be reviewed to verify the required methods of excavation to be undertaken – e.g. Vacuum Excavation. Exposed services will be protected if reburied.
3. Hold points at critical stages to be implemented i.e. start of excavation, change in design, additional unknown services etc.
4. A full suite of trial excavations to manage risk of services with uncharted spurs and electric pot ends will be carried out. Ground Penetrating Radar Services have also now been utilised.

