

Gas Utility inside Containment Damage

Document No: IW-HSQE-SA-27

Revision:1.00

Approved By: James Cullen

Where did this happen and what date did it occur on?

1. What Happened?

- The GO used a consaw to cut into the cast iron main believing it to be the cast water main. The cut cast iron pipe contained the inserted $\text{Ø}125\text{mm}$ LP gas main which the GO also cut.
- There was an uncontrolled release of natural gas, on smelling gas, the GO stopped works and exited the trench to notify his supervisor.
- No injuries occurred during this incident.



Fig 1 Location of the Excavations

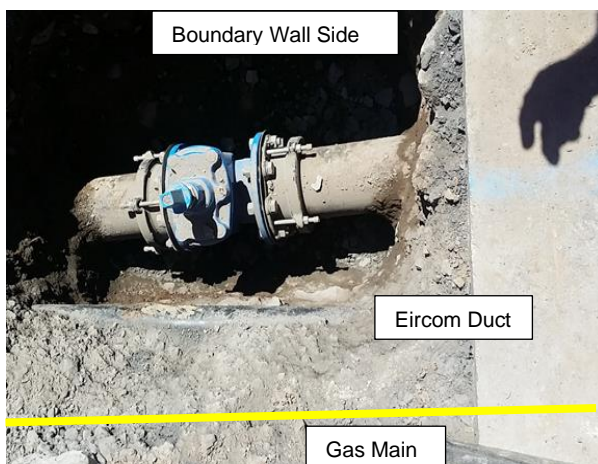


Fig 2 Excavation 1 Services Layout



Fig 3 Excavation 2 Services Layout

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2. Immediate Actions

- GNI notified immediately and carried out the repairs.
- Crew secured the area while waiting for GNI.
- A review held in site office to discuss the dangerous occurrence with crew and site agent involved.

How did this happen?

- A WNM crew were completing lead pipe replacement works services, they had excavated a trench and exposed 2No. cast iron mains pipelines in the footpath in order to install 2No. sluice valves to the facilitate works.
- The Utility drawings indicated that there was a Ø125mm LP Gas main inserted in a cast iron pipe in the vicinity of the works.
- On the previous day the cast iron water main was exposed and a sluice valve was inserted. In this excavation the cast water main was to the far left (nearest the boundary wall) with an eircom duct and gas mains to the right of the water main (Fig2).
- A second trench was opened, exposing two cast mains, 30m from trench opened previous day which was on the footpath on the opposite side of a road junction (Fig 1). The foreman instructed his GO to cut through the cast iron main at the boundary wall side, believing it to be the water main as this was the lay out that had been identified on the previous excavation.

3. Further Actions/ Recommendations

- Do not assume that utilities identified in one trench will be in the same position elsewhere.
- Where services of a similar nature have been identified, further investigation works should be carried out to confirm the identity of the service such as contacting the service provider, identifying service connections etc.
- Where it has been identified that gas mains have been inserted in cast pipe and cast iron water mains are in the vicinity of these services, do not cut pipework until the contents have

SAFETY ALERT

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been suitably verified.

- Mechanical equipment should not be used for cutting cast iron water mains where cast gas mains are known to be in the vicinity, use a pipe cutter.

4. Further Information

For further information on this safety alert please contact hsqe@water.ie

5. Distribution list

Internal		
Asset Operations <input checked="" type="checkbox"/>	Asset Delivery <input checked="" type="checkbox"/>	Asset Strategy <input type="checkbox"/>
Asset Management <input type="checkbox"/>	All IW staff <input type="checkbox"/>	
Other Please Specify _____		

External		
Local Authority <input checked="" type="checkbox"/>	DBO <input type="checkbox"/>	Capital Contracts <input checked="" type="checkbox"/>
Relevant Framework Contractors <input checked="" type="checkbox"/>		
Other Please Specify Civil Framework		