

Excavation Safety

Document No: **IW-HSQE-SA-58**

Revision: 1.00

Approved By: Finbarr Gubbins

1. What Happened?

Over the past number of months there has been a noticeable increase of incidents and inspection findings relating to excavation safety on Irish Water Projects. These findings relate mainly to poor trench support, poor edge protection and unsafe access and egress. The following are two examples incidents which resulted in operatives working in unsafe excavations which placed them at a high risk of serious injury/fatality. These incidents were classified as High Potential (HiPO) Incidents:

Incident 1:

While exiting a trench an operative entered an unprotected section of trench that did not have the specifically designed temporary trench support in place. The operative was exposed to a section of trench that was not supported and could have collapsed potentially resulting in a major injury or death.



SAFETY ALERT

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Excavation Safety

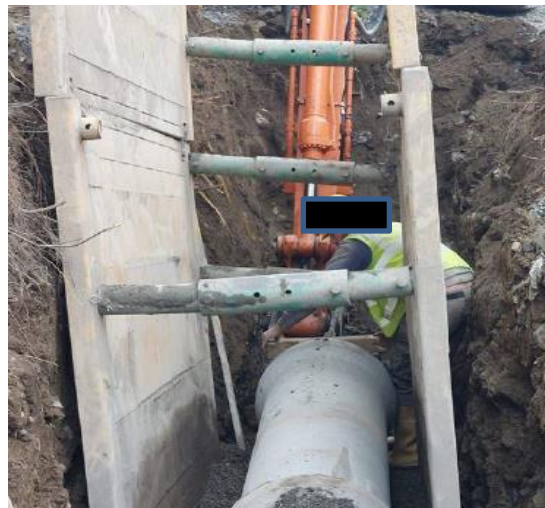
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Incident 2:

As works on a pipelaying activity progressed, operatives were witnessed working outside of the confines of a trench box and thereby putting themselves at risk of serious injury/fatality. The access and egress to the excavation, along with poor excavation edge protection placed both operatives within and working adjacent to the excavation at significant risk.



2. Immediate Actions

Incident 1:

- Operative asked to leave excavation immediately by the Inspection Party.
- Temporary Works Design installed by competent personnel.
- IW Review meeting held with PSCS Senior Management and the Resident Engineer.
- Review of site supervision on site and training associated with those personnel.

Incident 2:

- Works ceased and crew stood down until an action plan was developed and implemented (Plan included: Excavation made safe, improved trench & edge protection, RAMS updated, and senior management provided behavioural based safety briefing to crews).
- Excavation made safe and appropriate edge protection installed

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- Suitably sized trench box sourced and installed in the excavation

3. Further Actions

- Do not enter excavations without first checking if trench support is required and that the excavation has been inspected and risk assessed by a competent person.
- Temporary Works must be designed by a competent person and must be installed by competent personnel. Where excavations are battered back the angle must be sufficient to prevent collapse.
- Physically demarcate all NO-GO Areas
- Planning should be in consultation with those undertaking the works.
- Access/Egress arrangements should be considered as part of the temporary works design.
- Plan ahead - Carry out a full review of the work area, access routes and consider emergency rescue before works commence. Clearly identify access / egress points in site specific risk assessments and ensure these are communicated to all stakeholders.
- Ensure that all trenches are adequately secured to prevent falls into the trench.
- Ensure adequate site supervision and resources are in place at all times. When this is not the case STOP and Do Not Proceed until both are available.
- Ensure task specific risk assessments are completed and that all potential activities that your team are working on are identified, risk assessed and have control measures in place.
- Ensure all control measures are in place and are understood by all.
- If something seems unsafe or causes you concern – STOP, evaluate and discuss with your Supervisor before proceeding.
- Change Management - Where any unplanned/unforeseen changes in activity occurs, stop, and reassess the works and any additional controls that may be required. Time vs Risk: Use of Hold Points in Method Statements/SSOW's
- Consider developing toolbox talk and discuss the contents of this Safety Alert with

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all staff.

4. Further Information

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

5. Distribution list

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