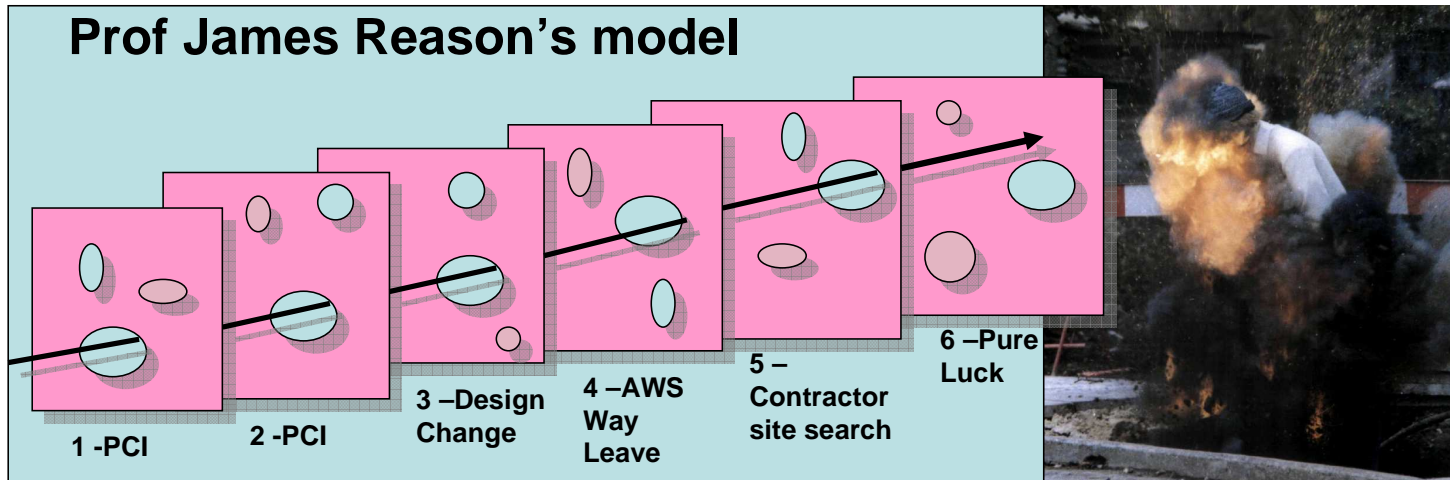


Colchester High Pressure Gas Mains – Near Miss



• What happened:

- The location of a flare stack had been changed to just outside the Colchester STW fence line. The Pre-Construction Information (PCI) utilities search did not include the utility search in this area. Ground investigations were being carried out and through additional utility checks for another scheme, the location of a LHP gas main in this area became known.

• What went wrong:

1. The First Revision of the PCI was relevant to the CHP work, well inside the boundary fence. A drawing showing the gas main location was not presented with the first revision of the document.
2. The second revision of the PCI covered the Main works at Colchester. No fresh utilities search was carried out and checking and approval procedures missed the omission of the National Grid pipeline drawing.
3. The decision to carry out works outside the existing boundary is a **significant change**, which should have been communicated to the CDMC, this was not done.
4. AWS were unaware of the location of the gas pipe line.
5. The Contractor carried out a visual check of the location and spotted poorly maintained gas markers and methane caps. An assumption was made that the gas markers were attributed to the methane caps not the gas pipe line.
6. It was only due to luck that the borehole team did not hit the high pressure gas pipe line.



- A workshop is to be organised to improve designers understanding of ownership of the design at various stages of the project and toolbox talks will be held with the design teams to discuss systems to communicate significant design changes

Actions taken :

- The template of the Pre-Construction Information pack has been altered to include a **Utilities checklist**. Section 3 now includes a description of the **significant finds**. The boundary of the utilities search has been included. A table has been included stipulating the ownership of the document from start of outline design to handover to the Construction Phase Plan.
- **Significant design changes will now generate a revision of the PCI, to be checked by the CDMC.**
- Preparation of utility services marking information poster
- PC records visual hazard markers as appendix in the CPP.

Lessons Learned :

- The Pre-Construction Information pack was checked for both revisions, but the omission of the pipeline drawing was not identified. This was due to the lack of a full checklist, giving the names of all relevant utilities and the results of queries to these utilities.
- The PCI document did not stipulate where the boundary of the service checks was. The assumption, that only utilities within the Colchester STW fence line should be recorded, may have led to the omission of the gas pipeline in the initial revision of the PCI.
- There was confusion concerning the ownership of the PCI and who should update the document. As CDMC, MM own the document and designers have a duty to pass on relevant information to the CDMC.
- Significant design changes should be reported to the CDMC. The best way of doing this is to prepare a new revision of the PCI.
- AWS should be fully aware of Way Leaves on their land.
- The principal Contractor needs to be fully aware of the meanings of utility markers.

NOTHING WE DO IN SPECIAL PROJECTS IS SO IMPORTANT THAT WE CANNOT TAKE TIME TO DO IT SAFELY