No Escape From Cave-In

One pipelayer was crushed to death and another injured when a trench collapsed. They were laying sewer pipe in a trench four feet (1.22 meters) wide at the bottom and 15 feet (4.57 meters) wide at the top. It was not shored or otherwise supported to prevent a cave-in. The soil in the bottom part of the trench was mostly sand and gravel and the upper portion was clay and loam. The trench was not protected from the vibration of heavy vehicle traffic on a nearby road. To exit the trench, the workers had to climb over backfill.

When they tried to leave the trench, a small slide occurred, leaving one employee trapped ankle-deep. When the other worker came to his aid, another slide occurred, covering him to the waist and the first employee to his chest. The first employee died at the scene of the cave-in from a ruptured heart. The other worker received a hip injury.

Walls of trenches in unstable or soft material must be shored, sheeted, braced, sloped or protected in some manner to prevent cave-ins and protect employees from incidents such as this. In this case, use of a shoring cage designed to protect workers in excavations would have been prudent. Exit ladders must be provided as a means of quick exit. Additional precautions must be taken to secure excavations subject to vibrations from road traffic or heavy equipment.