Underground Electrical Hazards for Municipalities Stats and Facts



FACTS

1. **Safety is a top priority:** Before beginning any work, ensure that you have the proper training, equipment, and safety gear to protect yourself from electric shock, arc flash, and other hazards.
2. **Underground electrical systems can be difficult to locate:** Underground electrical systems can be challenging to locate, especially if they are buried deep or if the records of their location are inaccurate or outdated. It is crucial to use specialized equipment like ground-penetrating radar or electromagnetic locators.
3. **Different types of cables and conduits may be used:** Underground electrical systems can use different types of cables and conduits, including direct-buried cables, duct banks, and concrete-encased ducts.
4. **Excavation can cause damage:** It is important to follow the proper excavation procedures and avoid damaging the cables or conduits during the digging process.
5. **Permits and approvals may be required:** Working with underground electrical systems may require permits and approvals from local authorities, especially if the work involves digging or disturbing the ground.
6. **Maintenance is important:** This includes inspecting and testing the cables, conduits, and related equipment for damage or wear and tear, as well as cleaning and repairing any issues that arise.
7. **Training and experience are critical:** It is essential to have qualified and experienced personnel who are familiar with the specific requirements and safety procedures for underground electrical work.

STATS

- Fifty-five construction workers are killed each year by electrocutions from overhead and underground power lines. Thousands suffer from the most painful bums you can imagine. The scars from these bums will never go away. According to one major insurance carrier, the average claim cost for power line electrocutions is over $550,000.
- Statistics show that over half of the construction workers who were injured or killed from power line electrocutions were between the ages of 20 and 35. Contact with buried underground power lines caused 1% of those fatalities.
- According to the U.S. B.L.S, working with underground electrical equipment can be hazardous, and the risk of injury is significant. In 2020, the Bureau reported that there were 8,140 nonfatal occupational injuries and illnesses in the electric power generation, transmission, and distribution industry. Of

those, 1,620 were classified as “days away from work” cases, meaning the worker was unable to perform their job for at least one full day.