



Construction Solutions

Ground Penetrating Radar & Engineer Consulting

Locating Tensions Cables

Cut with confidence, not hope...

Many structures contain tension cables within the concrete. Post-tensioning strands are critical in the structural strength of a concrete floor. Cutting just one cable can be catastrophic and result in expensive repairs. Some buildings that commonly incorporate tension cables in concrete include:

- Parking Structures
- Office Buildings
- Apartment Complexes
- Hospitals
- Sporting Stadiums



Customer's Challenge:

Without knowing precisely where a tension cable is located in concrete coredrilling is not permitted. X-Rays of the concrete will be too costly and evacuation cannot be done for radiation exposure.

- Cut Post-tensioned cable can cost \$10,000-\$20,000
- Older PT cabled buildings have been known to "shoot" from sides or top of concrete
- Delays in job to repair cut tendons

Our Solution:

Ground Penetrating Radar, or GPR for short, accurately images PT Cables within concrete.

- No Radiation so no evacuation perimeters
- One side access
- Instant results, no developing x-ray films
- Approximately 5 minutes per hole
- Savings over 99% by eliminating cut PT Cables

Ground Penetrating Radar Applications:

Concrete Locates:

- Rebar
- Tension Cables
- Conduits
- Voids
- Delaminations
- Depth of Cover Analysis

Environmental Locates:

- Utilities
- Underground Storage Tanks
- Voids/Sinkholes
- Unmarked Graves
- Water Leaks
- Soil Layer Mapping

Transportation Uses

- Bridge Deck Corrosion
- Railroad Ballast Fouling
- Asphalt Overlay Thickness
- Pavement Thickness