

## Commercial Building Foundation Augmentation – Toronto, Ontario

March 2003

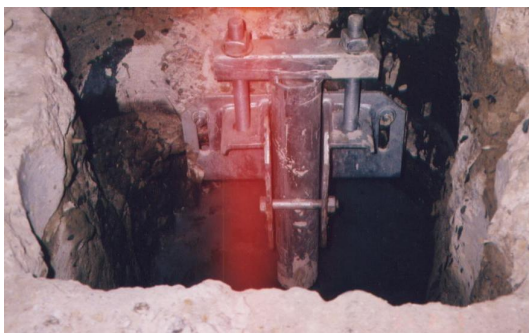
### The Problem:

- The owner of an existing one-storey commercial building wanted to make the structure a three-storey building
- Access to the site was limited to working from the inside of the basement due to property line restrictions
- Basement had 3 m (10 ft) limited height available to operate equipment
- Installation could not cause any vibration or produce any spoils as the building needed to remain open during construction



### The Solution:

- **Chance® Helical Piers** with foundation repair brackets were chosen to provide additional support to the existing footings
- Additional piers were installed to support new elevator shaft



Foundation repair bracket supporting existing structure



New construction brackets to be cast into new pile cap for elevator

**Product Used:** (158) Chance® Helical Piers with 150 mm (6") diameter grout filled **Chance® Helical Pulldown® Micropiles**

**Depth:** 6.7 to 8.0 m (22 to 26 ft) below footing elevation

**Loads:** 220 KN (50 kips) allowable load

**Finishing:** Foundation repair bracket for existing footing support  
New construction brackets for new pier caps



Finished structure with two additional storeys

**Geotechnical Engineer:** J.T. Donald Consultants Ltd  
**Chance® Helical Pier Installer:** EBS Engineering and Construction Limited