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SOILTESTING, INC.

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SOIL TECHNOLOGIES*
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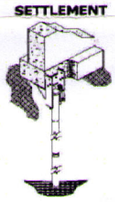
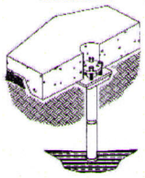
SETTLEMENT



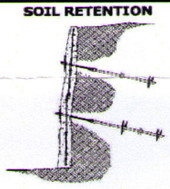
Foundation Underpinning with **Atlas Piers®** Resistance Products

CRACKING



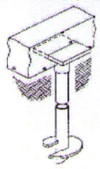
Slab Underpinning with **Atlas Piers®** Resistance Products

SOIL RETENTION



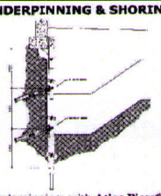
Retain with **Atlas Helical™** New Construction Products

NEW CONSTRUCTION



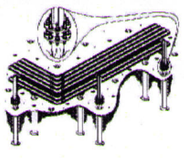
Support with **Atlas Helical™** New Construction Products

UNDERPINNING & SHORING



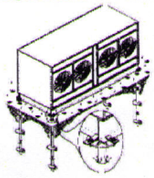
Underpinning with **Atlas Piers®** Resistance Products & Shoring with **Atlas Helical™** Products

PIPELINE SUPPORT



Support with **Atlas Helical™** New Construction Products

EQUIPMENT SUPPORT



Support with **Atlas Helical™** New Construction Products

Helical Pile Projects - *Technical Bulletin 2005*

New Floor Slab Support in Existing Commercial Building - Scarsdale, NY

- Existing building with pile supported walls and columns
- Floor slab experienced up to 30" settlement caused by up to 20' fills over 10'-15' of organic silt
- Installed *118 Helical Piles* up to 35' depths *within* existing building with 12'-17' headroom

New Commercial Building - Stamford, CT

- Installed *34* 3½" Tubular Shaft Helical Piles with *36* kips Design Capacity to depths up to *55 ft*

Addition to Existing Residence - Greenwich , CT

- Installed *18* 2⅞" Tubular Shaft Helical Piles with *25 kip* Design Capacity to depths up to *25 ft*

Helical Pile Advantages

If a project has these concerns:

- Limited access
- Vibrations caused by traditional driving
- High mobilization cost of tradtional pile driving equipment

Helical Piles may be a solution for your project

Atlas Tubular Shaft Helical Pile Advantages

If you are reluctant in allowing to support building on 1½" or 2" shaft helical piles (pencil rod) you may want to consider Atlas Tubular Shaft Helical Piles with a standard shaft diameter of 2⅞" to 4½" .

Unfamiliar with Helical Pile capabilities or design:

Atlas Systems, Inc., Geotechnical Engineers, will perform preliminary design for each of your projects *at no cost*

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TECHNICAL BULLETIN

2005

PROJECT: Underpinning and Lifting of Existing Foundation Wall
2 story apartment building with basement - New Haven, CT

PROJECT INFORMATION -

Problem: Foundation wall settlements up to 14" due to loose fill & organic silt and loose virgin sand soils

Solution: Installation of **ATLAS Resistance Piers** by **SOIL TECHNOLOGIES, *A DIVISION OF* SOILTESTING, INC.**

- Installation of 14 Resistance Piers with:
  Design Load of 22 kips and Test Load of 44 kips. Piers installed through fills and very loose sands to 20' - 25' depths.

Result: Supported and stabilized foundation wall with lifts up to 11½".
Any further settlement along foundation wall stopped.

Before

After

Atlas Resistance Pier Capabilities:

- Design Loads up to 55 kips (ultimate 110 kips).
- Limited access needed for installations 3½' x 3½' opening and 7' of Headroom.
- End bearing (minimum N- value of 40-50 required) 2⅞" to 4½" dual wall or single wall pipe.
- Atlas Piers are the most rugged H.D. pier available.
- Atlas geotechnical engineers are on call to provide preliminary design for every project

Atlas Resistance Piers are commonly used to stop and reverse foundation settlement. Typical working loads for 2⅞" to 4½" diameter piers range from 30 to 55 kips.

SOILTESTING, INC.