



## HARBOUR ARCH

Cape Town, South Africa



### Project Facts

#### Product

CFA Piles, Auger/Oscillator Piles, Anchors/Geonails, Shotcrete, Jet Grouting

#### Market

Commercial & Residential

#### Client

Harbour Arch Investments

#### Main Contractor

Franki Africa (Pty) Ltd.

#### Achievements

- Removal of ± 60 000m<sup>3</sup> of bulk earthworks.
- Working adjacent to operating companies and buildings.
- Working adjacent to and under live fibre and electric cables, sewers, water lines.
- Works completed on time with a challenging programme.

#### About the project

Harbour Arch is a mixed-use development which will encapsulate the principles of new urban living. Its six towers will be located alongside landscaped public spaces bustling with shops, restaurants, cocktail bars, international hotels, offices, health clubs and the largest selection of residential apartments in the CBD.

#### Challenges

Maintaining operational entities alongside the site, dealing with live services and managing the interface thereof with the client, City of Cape Town and Transnet.

Strong ground water was dealt with by well engineered solutions, including jet grouting to seal the basement.

Variable rock strengths encountered during the installation of the foundation piles.

The demolition of old foundations including the removal of existing floor slabs.

#### The solution

Installation of CFA soldier piles with jet grout columns, anchors and gunite for lateral support.

Large diameter temporary cased Bored piles were installed for the foundations with loads of up to 16000kN.