



CITY REGENERATION

City Housing

More office-to-apartment conversions planned for Joburg

SCHALK BURGER | STAFF WRITER

Two more office blocks are being converted into apartments on the corner of End and Bree streets, in Johannesburg, by low-income housing developer Affordable Housing Company (Afheco), which also developed the adjacent park, including the building of jungle gyms, and sports and action soccer courts, says specialist cutting and drilling contractor Q&A Coring MD Henry Dippenaar.

The contractor cut light wells in the centres of the buildings from the roof down, and used diamond-impregnated aris saw-blades and core drill bits to cut out the concrete slabs inside the beams, preserving the integrity of the building's structure. The final demolition works have been completed, with construction work due to start in June.

Precast façades with small windows were attached to the exterior of the offices, but this design severely restricted external light from penetrating the building. Q&A is removing alternating precast façades to

install bay windows for outward facing flats, while the light wells will provide light, ventilation and services to the inner apartments.

The precast concrete façades are attached with steel reinforcing pegs, and are cemented in place. Each weighs about half a ton. Q&A attached the façade to a block-and-tackle bolted to the floor and then drilled through the reinforcing bars using a Shibuya diamond-tipped coring machine. The façade was then safely pulled into the building and demolished.

"The aluminium frames in the demolished blocks were salvaged and stored for future maintenance work on the remaining windows," he adds.

The diamond-impregnated aris saw blade and the diamond-segmented coring machine were supplied by diamond cutting tool manufacturer Diamond Products. The company helped the contractor with the innovation and manufacture of the diamond tools and advised on tool specifications to perform the demolition within scope and deadline.

The ground floors of the buildings will provide space for commercial shops and services, adds Dippenaar.

Further, the development takes place on the same street block as other Afheco developments, including corporate offices, a supermarket and further housing developments that will convert the offices on the corner of End and Rocky streets into apartments.

STORY HIGHLIGHTS

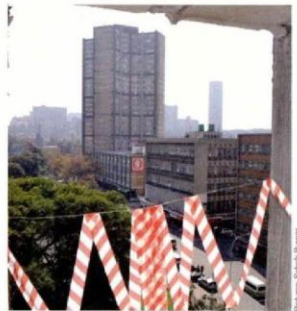
>> Two more offices are being renovated near the Johannesburg central business district, within easy access to transport networks.
>> Renovation of the offices required precise demolition to create light wells while maintaining the integrity of the structure to change its design to one suitable for permanent occupation.

The office blocks had been used by illegal occupiers for a number of years, but inadequate sanitation and ventilation contributed to squalid conditions. Q&A's work ended in May, but the final buildings will be ready for occupation during 2013, he says.

"Houghton, the central business district and the highway are each five minutes away," says Dippenaar.

Further, the buildings are situated about two blocks away from the Doornfontein train station, and are on the routes of taxis using the Bree Street taxi rank.

ENGINEERING NEWS COUPON ON PAGE 74 E26682



Picture: Schalk Burger

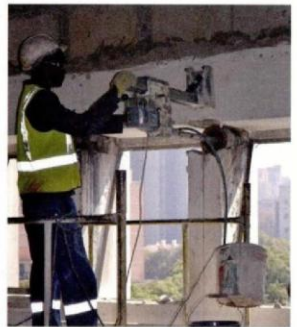
CONVERSION

The renovation of the old office blocks is taking place near other renovated buildings and parks



REMOVING FAÇADES

Contractors are removing alternating façades to install bay windows



CORING

A construction worker drills through reinforcing steel that holds in place heavy precast concrete façades