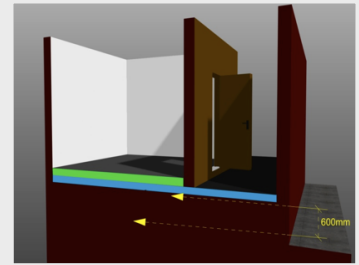




**First National Bank, Sasolburg,
South Africa**



PROBLEM

The bank vault was out of level which caused the door to self close; The 30 ton safe had subsided by 14mm on the left hand side of the door opening caused by badly compacted fill; Due to the fact that the floor of the vault is constructed of 2 layers 50mm steel plate with concrete infill, this prevented drilling vertically through the floor.



The work was executed during normal banking hours and did not cause any disruption to the daily functioning of the bank. Only one technician was located inside the bank vault monitoring the laser levels while the injection process was executed from the exterior of the building.

SOLUTION

One wall of the safe is adjacent to an external wall of the building and on the other side there is a passage between the external wall and the safe.

The internal floor level is 800mm above external ground level;

The drilling operation was executed horizontally from the exterior of the building, a number of pipes were inserted 600mm below floor level and directly below the concrete floor slab on the two sides, in varying lengths, reaching to the centre of the vault towards the subsided corner.

The whole operation took 5 hours and the floor was successfully raised by 11mm achieving optimal lift for the door to function correctly.

CASE STUDY