

# Bill Boley

“Controlled Hydraulic Movement”

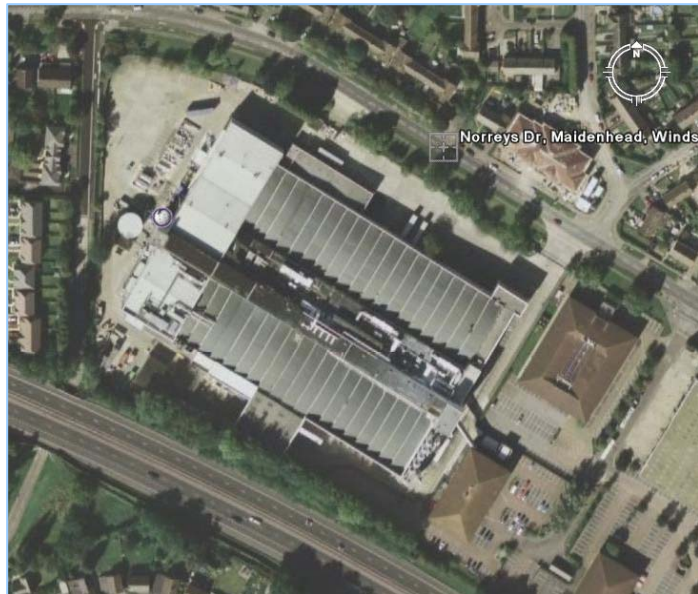
*in action*



## Jacking expertise keeps the roof up at GlaxoSmithKline

Jacking and hydraulic movement specialists Bill Boley have successfully completed a tricky jacking and monitoring project at GlaxoSmithKline's premises in Maidenhead.

Jacking and hydraulic movement specialists Bill Boley have successfully completed a tricky jacking and monitoring project at GlaxoSmithKline's premises in Maidenhead. The 1930s building, which is a well known land mark for travellers along the M4, features two parallel, thin wall curved concrete and glass roofs. When GSK planned to install a lift going up through the roof, important structural factors had to be considered. The design engineers calculated that any changes to the structure would significantly alter the stress patterns in the roof.



To relieve these stresses the roof had to be transferred onto new columns, substantial extra structural steel added and the original tension rods released. During critical stages of the construction Bill Boley were commissioned to provide temporary support props preloaded via sixteen computer controlled 50 tonne jacks. Throughout the work, the roof and tie rods were continually monitored with an array of strain gauges and jacking loads were adjusted to ensure that the stresses remained within the calculated tolerances.

The project went completely to plan and once the lift had been installed and the new support structure completed, the load on the jacks was removed.





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