

# Case Study

DPDS CONSULTING GROUP | ARCHITECTURE



## Williams F1 Oxfordshire

Commissioned by Formula One Grand Prix Team, Williams F1, DPDS has successfully completed the coordination and procurement management of a technologically advanced new wind tunnel facility.

Working alongside specialist contractors for the wind tunnel, rolling road, model support and wheel motion systems DPDS managed and integrated the works to the completed facility.

A wind tunnel such as this (although termed as 'low speed' runs at 200mph), together with the rolling road produces sound levels in excess of 100db (the sound of a loud rock concert).

With residential properties in close proximity the operating sound of the facility had to be attenuated to less than 5db above background noise at the nearest property. DPDS liaised with an appointed acoustic consultant and all other parties to design suitable enclosures including the external wall and roof envelope to meet this stringent requirement.

# Williams F1



**Client** Williams F1

**Business Sector** Research

**Approximate Contract Value** £20m

**Date of Execution** 2007 Completion

**DPDS Key Personnel Involved** Martyn Howland

## Key Factors

- A highly engineered and sophisticated design incorporating aerospace technology.
- Multi-faceted engineering required liaison with world's leading specialists in wind tunnel design and aerodynamic testing based in America.
- The design process was highly involved determining a fast-track delivery to enable early commissioning of the facility for benefit of commercial and competitive racing advantage.
- A design team led by DPDS Architecture had to account for vibration, noise, high energy loads and extensive coding requirements.
- Apart from the advanced engineering facility DPDS were tasked by the Local Authority of reducing the apparent scale and bulk of the building whilst nevertheless meeting the client's aspirations of providing a 'high tech' facility.
- The project was successfully delivered on time and within budget.