



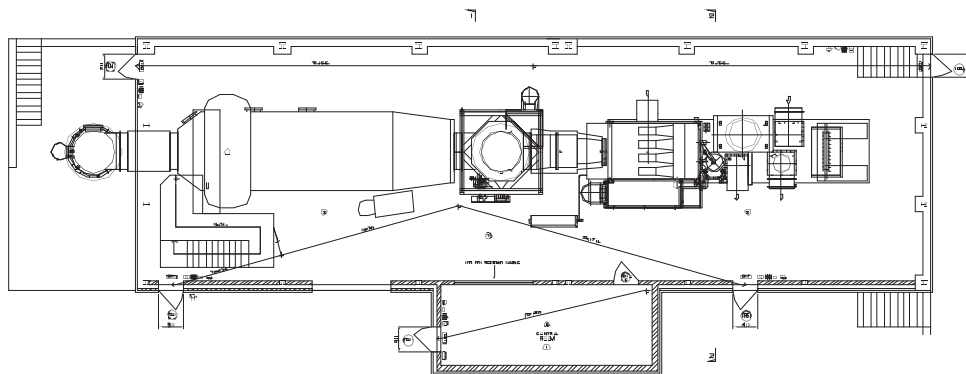
POWER GENERATION

Design and Construction of CHP and CCGT Plant in partnership with **ABB**

Completed in 2001, Carbury Combined Heat & Power Plant was the first design and build power generation project undertaken by Nicholas O'Dwyer. The project was headed by ABB and Nicholas O'Dwyer were appointed as civil/structural designers and construction supervisors with responsibility for detailed design, design co-ordination, sub-contract tender assessment, construction supervision and cost reporting.

Since then we have been engaged as civil/structural designers and project design co-ordinators on two peaking plant tender designs. The first design allowed for the provision of two CCGT (Combined Cycle Gas Turbine) plants with a combined in-service capacity of 230MW. The main feature of the civil/structural design was the poor ground conditions necessitating a piled foundation design for the main turbine bases and the skid platforms. The project also required the design of a complete distillate water production system from a polluted water source requiring the design input of our in-house Water Department.

The second peaking plant had a smaller capacity of 116MW and allowed for the use of smaller turbines on raft foundations. Being located beside an existing power plant posed particular challenges for the co-ordination both of construction works and services installation. The project also involved modifications to the existing accommodation and storage facilities within the power station complex.



GROUND FLOOR PLAN
CARBURY C0-GENERATION MODULE



Nicholas O'Dwyer
CONSULTING ENGINEERS