

Creation of New Motorway Junctions / Roundabouts, M181



Location:
Scunthorpe, North
Lincolnshire



Client:
Maltgrade Ltd.



Value:
£11M

Civil Engineering

Structural
Engineering

Building
Consultancy

Geotechnical and
Geoenvironmental
Engineering

Project Management

Specialist services

The Lincolnshire Lakes scheme involves the creation of six new waterside villages which include recreational lakes with artificial beaches, shopping centres, schools, cafes, pubs, hotels, restaurants and over 7,000 new homes.

Access to the scheme requires the creation of a new junction on the M181, connecting the M181 and the B1450 Burringham Road to infrastructure supporting the hundreds of new homes.

Engineering and Design Factors

The design of the new roundabouts presented several engineering challenges. Balancing traffic flow, accommodating diverse vehicle types, and implementing safety measures require meticulous planning. Moreover, addressing environmental concerns and cost-effectiveness was crucial, demanding a well-thought-out design that harmonised functionality and sustainability. Navigating these multifaceted challenges was crucial for the project's success. Securing approvals involved adherence to national and local guidelines, and collaboration with National Highways and North Lincolnshire Council, both as Highway Authorities, as well as liaison and management of the land owner, the Environment Agency and the local Drainage Board.

Description of the Works

Alan Wood & Partners provided the full S38 and S278 adoptable highway design works, including drawings to show site clearance, surfacing, kerbing, horizontal and vertical alignment, proposed levels, gully locations, drainage, attenuation basins and SuDS, as well as milling, regulating and re-surfacing, white lining and signing. We undertook Vehicle Restraint risk assessments and advised on the landscaping, verge treatment and embankments' geotechnical design. We also completed a drainage related Departure from Standards.

Core services

Civil Engineering / Structural Engineering

Sectors

Residential / Utilities and Infrastructure

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