

Description

- ◆ Our team have been providing technical design support to Interserve Construction Ltd in order to deliver sewage treatment and water treatment projects for South West Water & Wessex Water
- ◆ Under this call-off contract, SDS has delivered infrastructure, lighting, power and controls designs for complexed process facilities to upgrade essential services for the water industry.



Benefits Delivered

- ◆ Fully coordinated detailed design of M&E using Revit MEP
- ◆ Stakeholder engagement and end user requirements fully considered and applied to design
- ◆ Development of collaborative software packages to enhance the level of information provided to improve the construction phase
- ◆ Our team includes experience and qualifications in high voltage systems, DSEAR engineering and specification
- ◆ Provision of as built information.

Mayflower Water Treatment Works

Description

- ◆ The first of its kind in the UK, State of the art works water treatment facility producing up to 90 million litres of drinking water every day

Involvement

- ◆ We undertook the full detailed design for the main electrical infrastructure around the site to support the building services and process equipment
- ◆ The external lighting design and controls to provide discrete functional lighting to meet the planning conditions and to avoid light pollution
- ◆ A fully coordinated internal lighting design to meet stringent lighting and emergency lighting levels for a high-risk facility including automatic lighting controls
- ◆ Consulted with stakeholders on electrical loading and plant arrangements, space configuration and consideration of builders-work necessary to accommodate the design.

Cheddar Chemical Dosing System

Description

- ◆ To increase capacity of the existing sewage treatment works we were appointed to design the services to add a new sludge liquor pumping station to a live STW

Involvement

- ◆ The development of the design intent to provide detailed drawings for multiple packaged plant and selection of materials to produce Block Cable Drawings, Single line diagrams, Cable calculations, termination details and loop diagrams
- ◆ Calculations undertaken using Amtech taking into account discrimination of all downstream protection devices to ensure resilience is maintained
- ◆ Engagement in value engineering process, highlighting the risk and benefits of alternative design options.

Thornbury Hydraulic Improvements

Description

- ◆ The Thornbury Wastewater Treatment project was the modification of the extended aeration treatment process where the raw material enters the STW to improve the hydraulic arrangement

Involvement

- ◆ Detailed design drawings produced in Revit MEP
- ◆ DSEAR assessment and design development to specify materials in the explosive atmosphere
- ◆ Engagement in value engineering process, highlighting the risk and benefits of alternative design options
- ◆ Provision of detailed developed drawings indicating cable sizes, number of cores, termination drawings and as installed drawings
- ◆ The provision of designer's risk assessments.

