

## PROJECT EXPERIENCE



### Sedgeberrow STW

Project:	Design & Build Electrical Package including all Cable Containment & Telemetry
Client:	MWH Treatment Ltd
Project Commencement:	October 2024
Project Completion:	August 2025

### Introduction:

Global Rail Construction Limited (GRCL) has completed a design and build electrical sub-contract for Sedgeberrow Sewage Treatment Works, on behalf of MWH Treatment Limited, a sister company from within RSK Group. This reflects an exciting diversification from the highly regulated UK rail industry, whereby GRCL was able to use and transfer its extensive Electrical and Mechanical design and engineering experience in UK rail, to support water management and treatment.

Our UK teams' scope of work included full system electrical design, installation of cable containment, LV sub-main installation, telemetry cable installation, termination of all final circuits, NICEIC testing & certification and handover for final system testing.

This latest success highlights the symbiotic expertise within RSK Group, enabling an exciting collaboration in order to deliver a bespoke turnkey solution for this project.

### Scope of Works:

GRCL's works included the design, supply, delivery to site, offloading, storage, installation, testing and commissioning of the following electrical installation works:

- All temporary and permanent detailed design deemed necessary for the installation of all temporary and permanent cabling and external lighting.
- All power, control, instrument, and communications cabling, glanding, containment and support systems
- Local isolators and junction boxes
- Lightning Protection study to align with requirements of ME24A and ME24B.
- Installation of lightning protection
- Site lighting, including switches local to structures.
- A PME based earthing system.
- Installation of instrumentation
- Supply and installation of all fixings
- Tagging of all cabling, plant, and equipment
- Inspection and testing of the entire electrical installation associated with the scope of works.

## Scope of Works (continued):

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Note: General electrical and ICA installation works included:

- LV Cabling including motors and associated controls.
- All cable containment required to enable above ground cabling to be installed.
- Supply of all instrumentation (excluding package plant and quality (analytical) instruments) as designated in the plant schedule.
- Installation of all instrumentation (excluding package plant instruments and in-line flowmeters).
- Supply & installation of any task and access internal or external lighting.
- Hardwired Telemetry Signals.
- LV earthing system including any earth pits / rods as required.
- Lightning protection to all structures within scope of the project.
- Equipotential bonding to all extraneous metal parts.
- Sealing of all cable ducts.
- Collaborative use of the BIM360 3D model for general arrangement detail and cable containment.

## Challenges and Solutions:

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The scheme featured a critical early milestone: delivering a DNO (Distribution Network Operator) upgrade to support the new installation overlaying the existing system, where power capacity was essential. Although this requirement emerged after contract award, GRCL embraced the challenge as a Design & Construct partner and proactively re-sequenced the programme to accommodate the change.

Throughout the project, significant scope evolution - ultimately increasing the overall account - was managed seamlessly. GRCL's

agility and collaborative approach ensured that critical milestones, including the DNO upgrade, were achieved without compromising the schedule. This adaptability safeguarded the integrity of the critical path and delivered a successful outcome for all stakeholders, demonstrating GRCL's capability to respond positively to dynamic project environments.

## Benefits:

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Mechanical and electrical services are central to the majority of construction and civil engineering projects. The increasing reliance on service installations, in all their forms, accounts for an increasing proportion of a project's out turn costs. Projects, therefore, need to take considerable care in the delivery of these works.

GRCL's track record working on M&E related projects is significant, allowing us to design and deliver customised solutions based on

a practical understanding of the project requirements. Services provided by the company are constantly upgraded through training and development and are consistently delivered to the very highest specification.