

Project Case Study: Elstow Landfill, Bedford

Services: Environmental, Site Investigation, Planning and Design



Demolition | Enabling Earthworks | Remediation | Drilling | Civil Engineering | Plant & Technology | Geotechnical | Environmental | Planning | Renewable Energy

The Sirius Group: Confidence you can build on

Client: FCC

Project: Elstow Landfill, Bedford

Duration: 12 months

Services: Environmental, Site Investigation, Planning and Design

Sector: Industrial Waste Management



Nearing completion of construction works
new weighbridge and offices installed

Project Description

Sirius Environmental were appointed by their client to complete detailed design for a brand new infrastructure and reception area for a new soils backfill site that was due to open. The site was an existing field with no infrastructure or services and was accessed through an existing site road that runs to an aggregate plant. A new entrance was installed along with a hardstanding areas. Including Drainage / New Sub Station / Foul Water System and Weighbridge / Offices and Plant Yard.

Site investigation was completed on the site prior to construction to establish the ground conditions to allow construction to commence. This investigation was taking through the design process to build the new reception area which had to be above a potential flooding level and all drainage had to be SUDS compliant and then settlement ponds introduced to allow clean water discharge into a local brook. The main access road from the highway was also widened as part of the works to allow safe passage of traffic.

Construction works complete and operational



Works outline

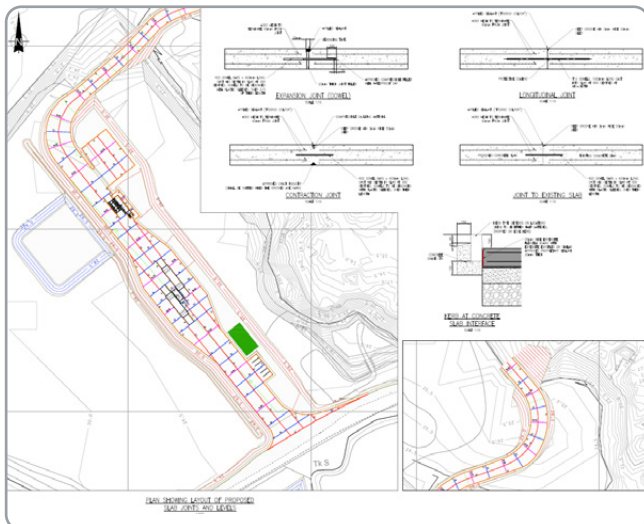
The Sirius Environmental engaged with FCC at the beginning of 2024 to develop a brand new reception and infrastructure area for FCC at their Elstow Landfill site. This comprised of:

- Completing Site investigation and testing of existing ground conditions
- Road Design
- Weighbridge Design and Foundation Detail
- Wheel Wash Design
- Surface and Foul Water Design
- Infrastructure Design for new Substation
- Incoming Water and Electrical services
- Office accommodation Operative Parking
- Acoustic Fencing installation.

Sirius Environmental took the planning outline drawings and completed a full detailed design for costing and construction. The design process included liaison with the statutory authorizes in relation to surface water control and archaeology. The project took approximate 12 month to complete and incorporated concrete road design with reinforcement detailing, complex earthworks model for the layout and the falls on the roads to ensure effective drainage and attenuation lagoon design to ensure compliance with discharge consents.

Due to the proximity of local business there was a large acoustic fence installed during the work by the site entrance.

Sirius have been involved in the project from inception, through the whole design process including liaison on site directly with the contractors all the way to completion of the Health and Safety file for the handover to FCC operations at the end of 2024.



Design drawing of concrete reception area and weighbridge compound



Concrete road way under construction

Demolition, earthworks, remediation, drilling and civil engineering contractors.
Geotechnical, environmental and planning consultants. Renewable Energy.

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