

SOLAR FARM DESIGN CAPABILITIES

Do you need advice for installing your solar farm on a restored landfill or quarry?

Through our solar farm consultancy services, Sirius can reduce the risks of construction on such sites, drawing on our technical expertise in the waste industry and geotechnical engineering.

Mitigating the impact of ground movement:

Construction over landfilled waste or made ground can be problematic, as significant long-term settlement may occur beneath solar panel frame and mounting systems, or the sub-structures for transformers and substations. We can model settlement and associated ground movements, highlight high and low risk areas for each site, and provide foundation solutions and construction advice for the solar farm infrastructure.

Protecting the landfill containment system:

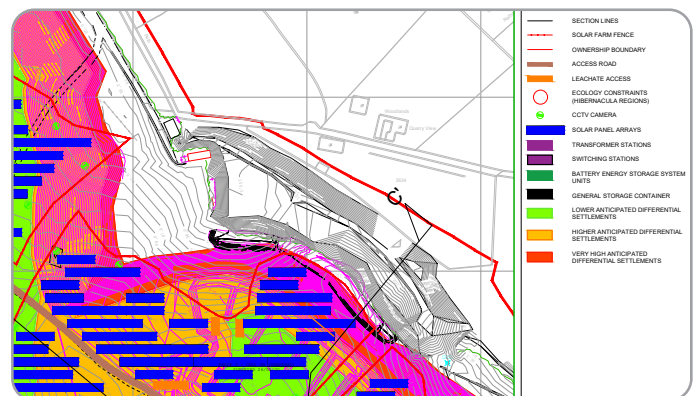
For landfill sites, we assess the risks associated with the stability and integrity of the landfill containment (capping) system. We also specify foundation solutions which ensure that the capping system integrity will not be impaired, protecting the local environment.

On-site quality assurance:

Sirius offer site supervision during the construction phase, for the purposes of:

- Ensuring construction is avoided in high-risk areas of the site;
- Recommending changes to foundation designs in areas of higher predicted ground settlement; and
- Checking correct foundations are installed, to protect landfill capping system.

Sirius provide a Final Construction Validation Report to verify that risks have been successfully addressed.



Highlighting low and high-risk zones for solar panel arrays



Alternative foundation types for solar panel frames



Sirius Quality Assurance Engineer checking construction

For further help or information, please contact our technical teams.

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