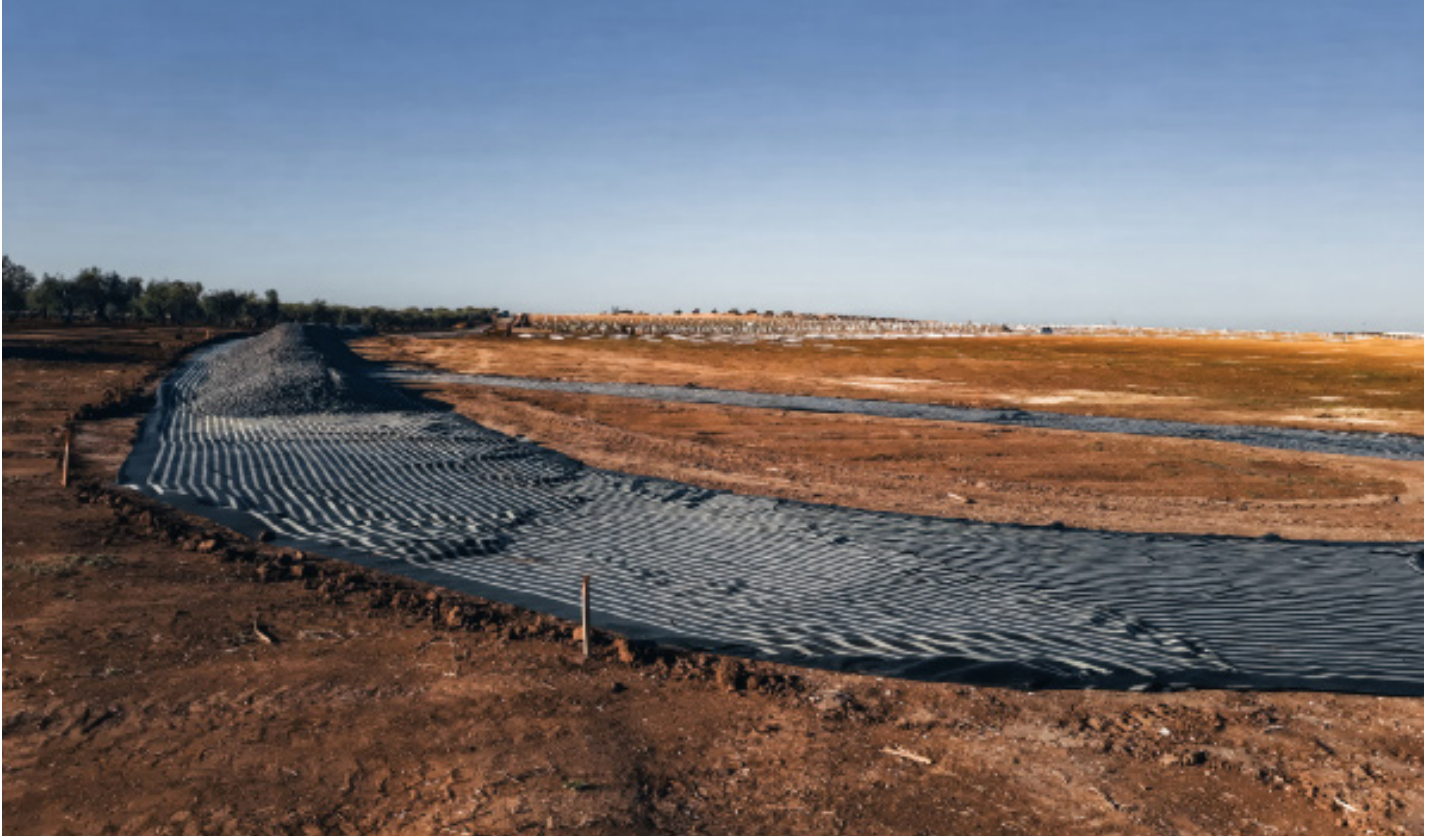


SOLAR FARM, ALMENDRALEJO, SPAIN

Stabilizing unpaved internal roads for a solar farm



Industry: Energy
Sub-industry: Solar
Location: Spain
Product: MIRAFI® HMi

Overview

The project aimed to construct a solar photovoltaic farm near the municipality of Almendralejo in the Extremadura region, southwest of Spain. The client's primary request was to design the most optimized section for the unpaved internal roads using geosynthetics to enhance their performance and durability. The design proposals began in 2021, with the supply of materials completed by the end of 2022 and the beginning of 2023. Collaboration was key to this project, and Solmax worked closely with the specialized distributor G&G Europe S.L. The specific design was chosen due to the low bearing capacity of the existing subgrade, necessitating a robust and effective solution. The successful

completion of this project benefits not only the client but also the environment, local communities, and sustainability efforts.

Challenge

The installation process required careful handling of overlaps over soft soil to ensure stability. The primary challenge was dealing with the soft subgrade of the solar farms. Additionally, unexpected rains complicated the installation due to the clayey nature of the subsoil, making the process more difficult in an otherwise dry region. Our extensive experience in similar

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CASE STUDY

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projects played a crucial role in overcoming these challenges. The project's uniqueness lay in its geotechnical complexity and the necessity to adapt to unexpected weather conditions. A thorough geotechnical report of the subsoil was instrumental in designing a suitable solution.

Solution

To address the challenges, we utilized 47,480 m² (51,103 yd²) of **MIRAFI HMi-5**, chosen for its excellent stiffness, which was essential for the design. Although alternative products from competitors were considered, the quality of **MIRAFI HMi-5** was deemed superior. The prompt delivery of materials was facilitated by our permanent stock in various factories, ensuring that the project stayed on schedule.

The client chose Solmax for our geotechnical knowledge, product quality, and the strength of our long-term relationship. This project enhanced our collaboration with the same client in Spain, LATAM, India, and other regions, demonstrating the value and success of our partnership.



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