

CLEANTECH SOLAR POWER PLANT STORMWATER DRAINAGE SAN ILDEFONSO, BULACAN, REGION III, PHILIPPINES

Channelling Works

Problem

The 22 MWP San Ildefonso Alternative Energy Project is consist of 64,380 solar panels built in the 24.5-hectare site and has the capacity to generate 30 GWH every year. In other words, the plant has the capability to provide power to approximately 15,000 household, which translates to an offset of 18,000 tons of CO2 annually.

In the construction of the solar power plant, Cleantech renewables is looking for solutions that can further reduce carbon footprint while generating savings from construction costs.

Solution

Reno Mattress was chosen to replace the original design of reinforced concrete as linings of storm water drainage canals. Significant savings in construction costs and carbon tonnage was realized. The interstitial spaces of the mattress offer a habitat for species that live in the transition zone between water and land. Reno Mattresses® are made from high quality steel wire, which is heavily galvanised to provide long term corrosion protection.

Client: Cleantech Global Renewable, Inc.

Designer / Consultant: GHD

Contractor: Global Electric Power Development Corporation

Products used (Qty.)

- Reno Mattress n/a

Date of construction: 10/2019 - 03/2020



During Construction



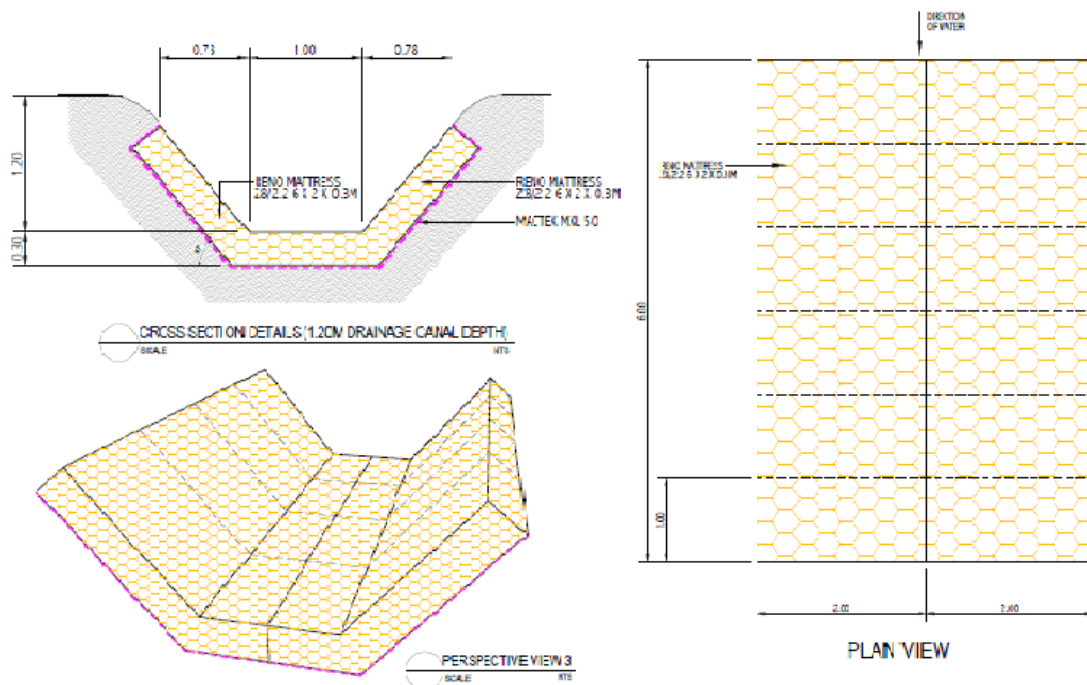
During Construction



After Construction



After Construction



PROPOSED TYPICAL DESIGN