# **Solar Installation**

Ashaiman / Ghana, 2019



# **Installation Description**

We installed 3 poles with 2 lamps and 14 poles with singe lamp. The lamps are constructed with a metal pole of 6m height. The batteries are fixed in a metal box, which is buried in a concrete basement in the soil. Since batteries don't like heat, we considered it better to keep the batteries at a cool place in the underground. Each lamp is equipped with a 12V / 24V / 20A charge controller, including the night light function. It was a challenge to get all the different materials together and to coordinate the work and purchasing of all the items.

This process delayed the installation of the solar street lamps. Some places are water locked and in the raining season the boxes get flooded. Therefore we fixed the metal boxes inside a concrete basement and sealed the boxxes with silicon to makes them water prove.

#### **Facts**

## Location

Tema / Ashaiman, the harbor city of Ghana, about 20km east of the capital Accra in Ghana.

### **Installation Date**

June to August 2019 in phases

#### **End Users**

The Provincial House, PDO, DBTI, Guest House, Boy's Hostel.

### **Technical Data**

## Double arm lamps:

- 2 x 24V / 50W LED lamps
- 2 x 12V / 200Ah Batteries

#### Single arm lamps:

- 1 x 24V / 50W LED lamp
- 2 x 12V / 100Ah Battery







