

## SALIENT FEATURES OF THE PROJECT

### General Information

Project Name:	Baguwa Rural Solar Drinking Water Project
District:	Kavrepalanchowk
VDC:	Kushadevi
Ward no:	1
Name of villages served:	baguwa,Bhatamase
Road Head:	Kathmandu-Panauti- Kushadevi- Baguwa 41 km all weather
Distance from road head to site:	Near site

### Design Information

No. of households:	36
No. of school:	1
Present population:	191
Total water demand:	8681 lpcd
Pipe Length (Distribution):	100m
Pipeline length (Transmission):	522 m
Total Head:	140 m
Autonomy days:	1.5 days
Electrical cable length:	80 m

### Water Source Information

Name of source:	Baguwa Khola
Type of source:	Stream
Source quality:	Drinkable directly
Date of discharge measurement:	2014-11-09(2071/07/22)
Method of measurement:	Bucket method

Measured discharge:	0.24 lps
Safe yield:	0.20 lps

### Structure Information

#### Civil Structure (Stone Masonry)

Intake:	1no
Filter:	1no
Collection tank with pump house:	1no, 8 m <sup>3</sup>
Distribution tank:	1no, 15 m <sup>3</sup>
Tap stand:	1no
No. of thrust block:	12 nos

#### Pipe Line

HDPE Pipe 40mm 10kg/cm <sup>2</sup> :	272m (Transmission)
HDPE pipe 25 mm (10kg/cm <sup>2</sup> ):	100m (Distribution)
GI pipe medium duty 1.5":	250m (Transmission)

### Electro-mechanical (estimated)

Capacity of Solar Array (WP) :	As required
Pump:	Any Pump/s that can lift water demand of 8681 liter per day at head of 140 m
Distance between solar array and pump:	80m
Lightning Arrestor:	As required
Surge Protector:	As required
Grounding:	As required
Circuit Breaker:	As required
Cable size (3% voltage drop):	As Required