

# DORDI KHOLA HYDROPOWER PROJECT

LAMJUNG, NEPAL



## PROGRESS REPORT

AUGUST 2014



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***Himalayan Power Partner Limited***  
***Energy Sector Research, Development & Consulting Services***

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# 1 Introduction

**Dordi Khola Hydropower Project** is a Run-of-River type hydroelectric project with generating capacity of 27 MW. The project is being developed by Himalayan Power Partner Ltd. (HPPL) Kathmandu, Nepal. HPPL is promoted by IME Group and later joined by NRN Investment Ltd. to develop Dordi Khola HPP with equity sharing in 49:51 ratios.

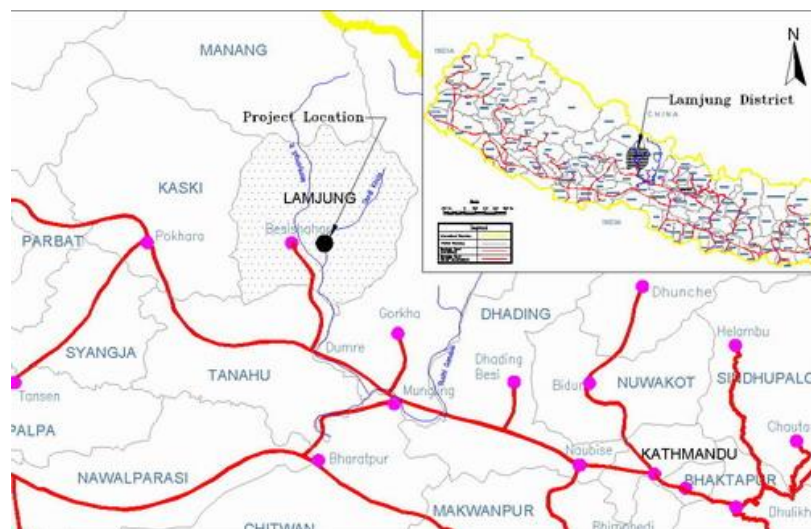
## 2 Project Development Milestones

- Survey License Issued : 26 May 2005
- Feasibility Study Completed : December 2012
- Grid Connection Agreement : 7 July 2010
- IEE Approved : 4 October 2010
- Generation License Obtained : 7 July 2011
- PPA Signed : 15 June 2012
- Detailed Project Report Completed : August 2013
- Facility Agreement Signed : 7 November 2013
- Construction Works Started : April 2014
- Required Commercial Operation Date (RCOD) : 15 June 2017

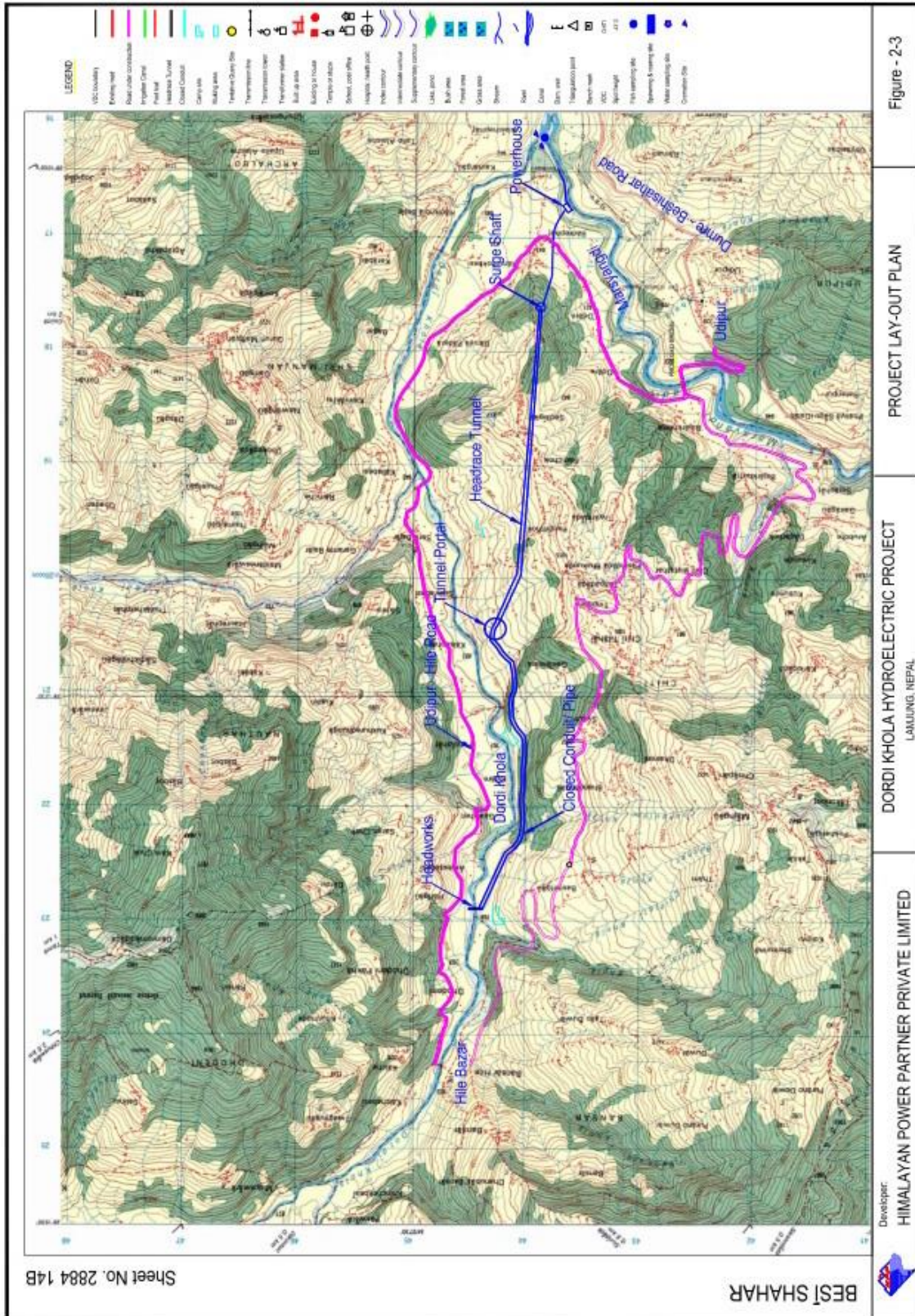
## 3 Project Description

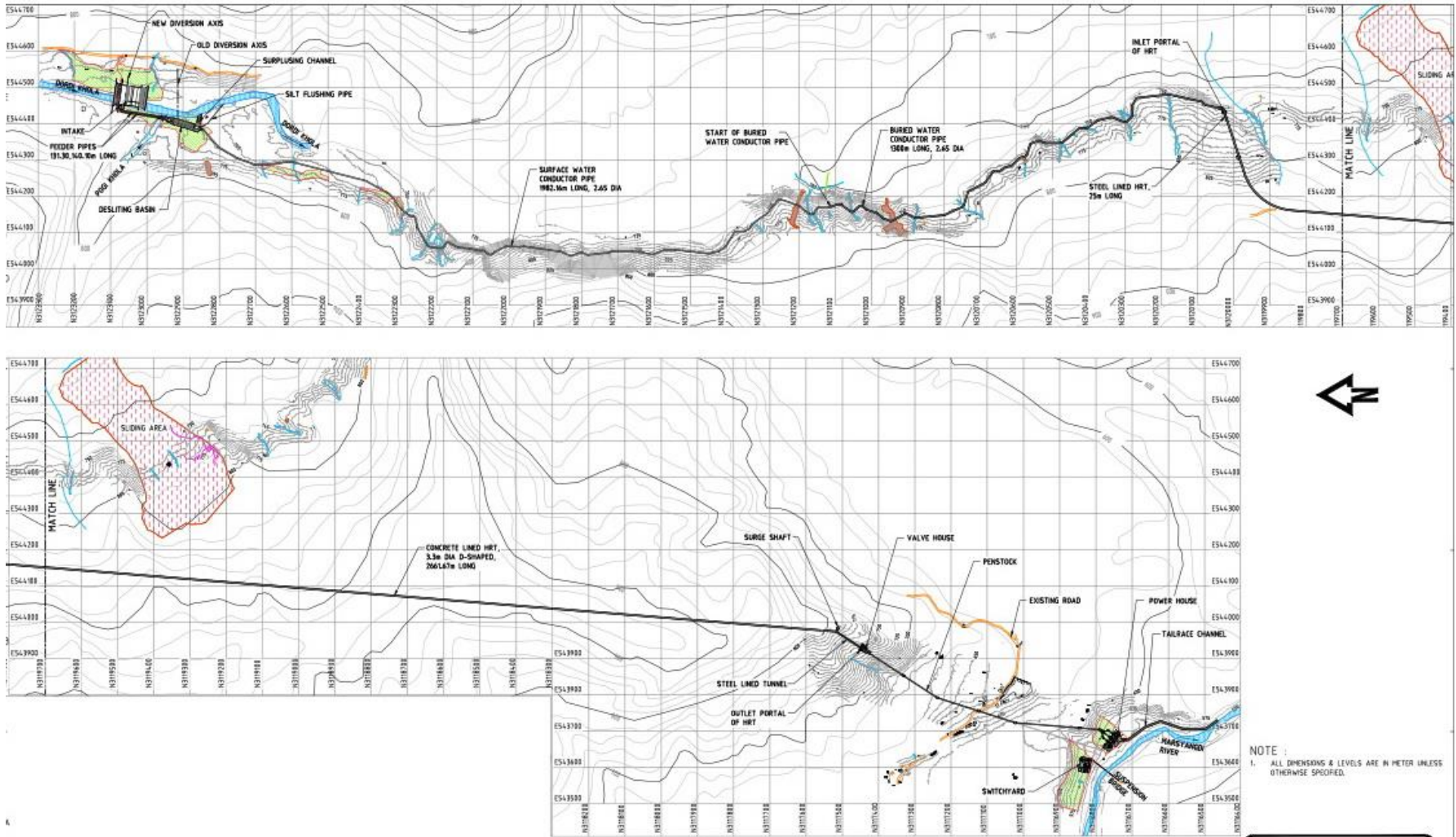
### 3.1 Location and Access

The whole project area lies in Chiti, Dhodeni and Bansar VDCs in Lamjung district in western Nepal. It is connected from Kathmandu by 170 km all weather metallic roads.



### 3.2 Project Layout Map





General Layout of the Project

### 3.3 Main Project Features

- Gross Head : 212.0 m
- Design Discharge : 15.28 m<sup>3</sup>/sec
- Installed Capacity : 27.0 MW
- Total Annual Energy : 148.697GWh
- Total Annual Contract Energy : 142.319GWh
  - Dry Season Energy* : 21.367 GWh
  - Wet Season Energy* : 120.952 GWh
- Power Purchase Agreement (PPA) Rate :
  - Dry Season Energy : 8.40/unit
  - Wet Season Energy : 4.80/unit
  - Price Escalation : @ 3% 8 times
- Water Ways
  - Closed Conduit/Steel pipe (Ø2.65m) : 3237 m
  - Headrace Tunnel (Ø3.3m) : 2662 m
  - Penstock Pipe (Ø2.3m) : 700 m
  - Tailrace : 330 m
- Powerhouse Type : Surface
- Turbine Type : Francis (3x9 MW)
- Grid Connection Point : Udipur Hub
- Transmission Line :
  - Voltage Level : 132 kV Single Circuit
  - Length : 1.2 km

### 3.4 Financial Indicators

- Total Cost : NRs. 3,595 million
- Total Capitalized Cost (Inc. IDC) : NRs. 4,235 million
- NPV : 1,396 Million
- IRR : 14.35 %
- IRR on Equity : 18.29%

## 4 Progress

### 4.1 Financial Progress

The Financial progress will be updated in every 3 months after quarterly meeting with the consortium banks.

### 4.2 Physical Progress

- **Contract Documents** for all the packages are being finalized. After discussion with the consultant it has been decided now to make only two packages of civil works (one for surface works and another for underground works). Accordingly the contract documents, tender documents and design drawings are being compiled. The consultant will submit all the final tender and contract documents by the end of September.
- The track opening along the headrace pipe alignment is being continued and till date opened up to CH 2+200m. The difficult part of about 350 m of rock cliff is also being excavated by breakers. It is estimated to take about 20 days more to complete the headrace pipe alignment track opening.
- The layout and centre line pegging work of the penstock alignment from the valve house to the powerhouse is going on. After 2/3 days in the presence of Amin and local land owners Kitta Kat will be continued and soon the land purchasing process will start.
- Discussion with the manufacturers of electro-mechanical equipment is going on aggressively and getting final quotations soon.