Salient Features

1	**Project Location**		
	Development Region	:	Central
	Zone	:	Janakpur
	District	:	Dolakha
	Intake Site	:	Bhimeshwor Muinicipality
	Power House Site	:	Bhimeshwor Muinicipality
	Project Boundary	:	Latitude - 27^0 36′ 37” N to 27^0 38’ 12” N Longitude – 86^0 02’ 23” E to 86^0 04’ 33” E
2	**General**		
	Name of River	:	**Charnawati River**
	Nearest Town	:	Charikot
	Type of Scheme	:	Cascade (Run-of-River)
	Full Supply Level	:	1054.08 m (Headpond NWL)
	Turbine Axix Level	:	851 m
	Gross Head	:	203 m
	Net Head		193.42
	Installed Capacity		6.8 mW
	Average Annual Saleable Energy		37.14 GWh
3	**Hydrology**		
	Catchment Area	:	96.92 km^2
	Mean Annual Discharge	:	5.20 m^3/s
	Design Discharge	:	4.19 m^3/s
	Probability of Exceedance	:	40 %
	Riparian Release	:	0.030 m^3/s
	Design Flood Discharge	:	163 m^3/s (100 Yr. flood)
4	**Diversion Weir/ Undersluice**		
	Type of Weir	:	Free Overflow Type
	Crest Length of Weir	:	18.0 m
	Height of Overflow	:	2.6 m (Excluding Foundation)
	Crest Elevation	:	1062.26 m
	Design Flood Level	:	1065.20 m
5	**Intake**		
	Type	:	Side Intake
	No.	:	2
	Size (W x D)	:	(1.4 x 0.9) m
6	**Gravel Trap**		
	Type	:	RCC (open) Hopper Shaped
	Size (L x B x H) m	:	(7.0 x 3.5 x 3.85) m
	Particle to be settled	**:**	> 0.2 mm
6	**Approach Canal**		
	Type	**:**	RCC Rectangular Open Canal
	Size (L x B x H) m	**:**	(28.53 × 1.7 × 1.7) m
7	**Settling Basin**		
	Type	:	RCC Hopper Shaped

	No of chamber	:	1
	Dimension (L x B x H) m	:	(42.0 × 6.0 × 5.2) m
	Particle Size to be Settled	:	> 0.2 mm
8	**Link Canal- I**		
	Type	:	RCC Rectangular Open Canal
	Size (L x B x H) m	:	(13.85 × 1.7 × 1.7) m
9	**Plunging Pool**		
	Type	:	RCC Rectangular (Open)
	No. of chamber	:	1
	Size (L x B x H) m	:	(14.5× 3.0 × 7.4) m
10	**Link Canal-II**		
	Type	:	RCC Rectangular Open Canal
	Size (L x B x H) m	:	(39.20 × 1.7 × 1.7) m
11	**Link Canal - III**		
	Type	:	RCC Rectangular Open Canal
	Size (L x B x H) m	:	(40.26 × 2.4 × 2.7) m
12	**Regulating pond**		
	Type	:	Rectangular
	Dimension (L x B x H) m	:	(11.0 × 5.0 × 6.3) m
13	**Headrace Pipe**		
	Diameter	:	1.9 m
	Length	:	4850 m
	Thickness	:	10 – 12 mm
14	**Tunnel**		
	Type	:	Inverted D-Shaped
	Dimension	:	(2.1 × 2.55) m
	Length	:	180 m
15	**Surge Tank**		
	Type	:	RCC, Circular
	Diameter	:	4.0 m
	Height	:	24 m
12	**Penstock Pipe**		
	Diameter	:	1.4 m
	Length	:	366 m
	Thickness	:	12 – 30 mm
13	**Power House**		
	Type	:	Surface, RCC Frame Structure
	Size (L × B × H)	:	(33 x 13.3 x 14.5)m
14	**Tailrace Canal**		
	Type	:	RCC Open Canal
	Size(L × B × H)	:	(125.0 × 1.9 × 1.75) m
15	**Turbine**		
	Type	:	Horizontal Axis Pelton
	Number	:	Two
	Rated Output Capacity per Unit	:	3400 kW
	Efficiency	:	90%

16	**Generator**		
	Rated output capacity per unit	:	4.25 MVA
	No. of unit	:	2
	Efficiency	:	96%
17	**Transmission Line**		
	Voltage Level	:	33 kV
	Length (approx)	:	1.5 km
	From	:	Switchyard of LCHPP
	To	:	Makai Bari – Jiri Transmission Line near Nayapul
20	**Construction Period**	**:**	Three Years