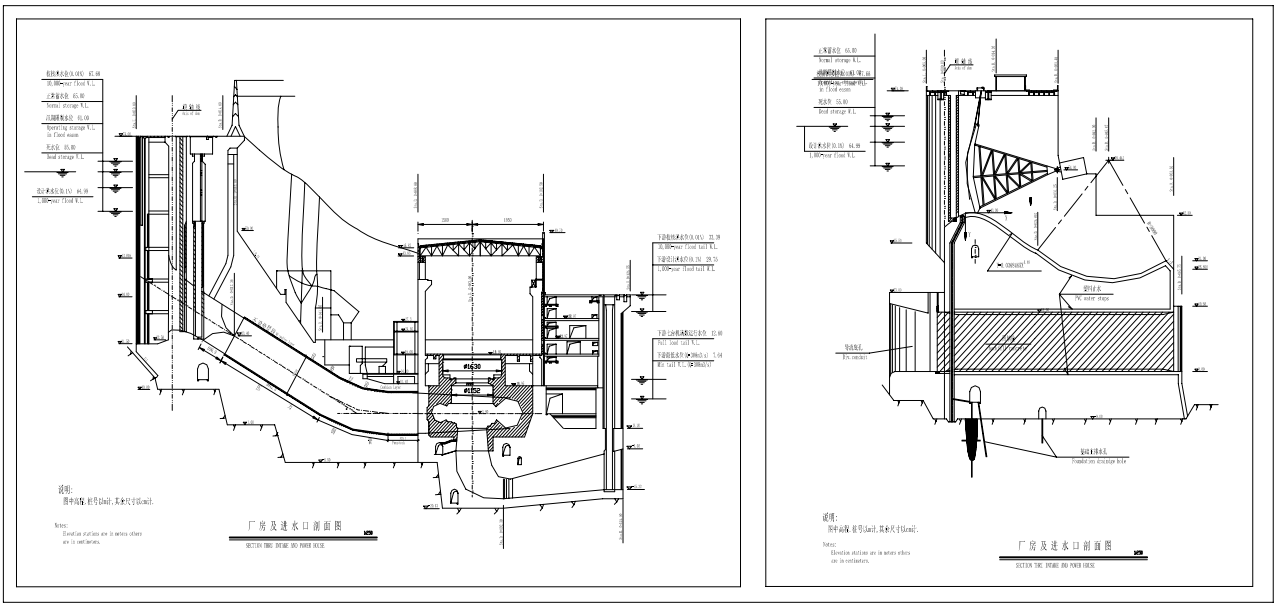
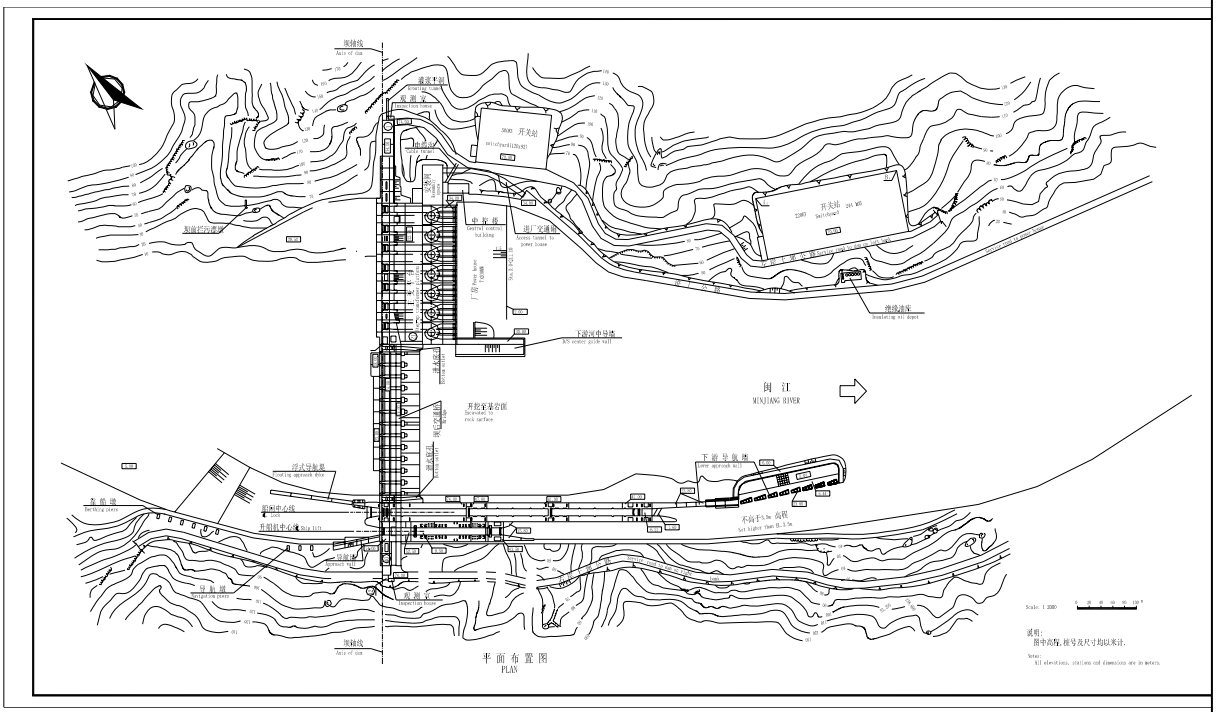
Shuikou

The Shuikou Hydropower Project is located on the middle reach of the Minjiang River, Fujian Province. It is the largest conventional hydropower project in the East China. With a total installed capacity of 1400 MW. The Plant is one of the key power plants in the Fujian Power Grid, undertaking the tasks of frequency regulation, load peaking, and emergency standby in the Fujian Power Grid. The project consists of concrete gravity dam, powerhouse, 220 kV switch station, 500 kV substation, one-way three-steps ship lock that can accommodate two 500-t barge and ship lift. Its main function is power generation, incorporated with navigation, flood control, irrigation and tourism.



General Features

NO.	Item	Unit	Quantity	NO.	Item	Unit	Quantity
1	Catchment Area at Damsite	km^2	52 438	20	Dam		
2	Mean Annual Flow	m^3/s	1 728		Type of Dam	PG	
3	Design Flood (1 000 year at damsite)	m^3/s	43 600		Max. Height of Dam	m	101
4	Check Flood (10 000 year at damsite)	m^3/s	51 800		Crest Length of Dam	m	783
5	Normal Storage W.L.	m	65	21	Spillway		
6	Dead W.L.	m	55		Type	Overflow Spillway	
7	Control Reservoir W.L. during Flood Season	m	61		Number of Openings		12
8	Design Flood W.L.	m	64.99		Gate Dimensions(W×H)	m	15×22
9	Check Flood W.L.	m	67.68		Type of energy Dissipation	Flip Bucket	
10	Total Reservoir Storage	10^6m^3	2 600	22	Bottom Outlets		
11	Active Storage	10^6m^3	700		Number of Openings		2
12	Reservoir Storage Character	Partial Seasonal Regulation			Gate Dimensions(W×H)	m	5×8
13	Installed Capacity	MW	1 400	23	Ship-Lock		
14	Number of Units		7		Capacity and Type	500t, 3-steps	
15	Unit Capacity (Turbine)	MW	200		Dimensions of Chamber (L×W×Draft)	m	135×12×3
16	Mean Annual Output	GWh	4 950	24	Ship-Lift		
17	Type of Turbines	Kaplan ZZ-LJ-800			Capacity and Type	500t, Vertical Lifting	
18	Type of Generators	Umbrella SF200-56/11950			Dimensions of Chamber (L×W×Draft)	m	124×12×2.5



General layout of Shuikou Hydropower Project