VOLUME- II-D

VOLUME – IID, Technical Data Sheets Civil

DATA SHEET FOR PUMP HOUSE		
Sr. No.	**DETAILS**	**Parameter / Requirement**
1.0	**GENERAL**	
1.1	Location/ Size (tentative)/ Carpet area of the Pump House (Sq. mtr)	**Pump House** At Each HW / SHW and Village Sump
1.2	Type	RCC frame work with brick masonry wall above plinth level & RCC walls up to plinth with **positive** suction type
1.3	Height of Pump House above Floor Level to Bottom beam of ceiling (m)	•**Without Gantry Structure up to 3.60 m** • **With Gantry Structure min Height 4.50m**
2.0	**Design Data**	
2.1	**Control levels**	
	a) Avg . Ground Levels	**As per Site or Design**
	b) Pump House Floor level	**Considering High Flood level**
2.2	SBC At site	Contractor Shall carry out SBC Separately although the location is nearer to proposed sump/ESR for Design Purpose
2.3	Water table	To be decided on basis of soil investigation.
2.4	Seismic	Zone III or as per latest revision of IS:1893
2.5	Water Density	9.81 kN/cum
2.6	Plinth level of Pump house	Avg. G.L. + 1 Mt. Ht.
3	**Design Requirement**	
3.1	**Standard Codes**	(1) I.S. 3370, Part-1 to 4, 1965 or latest revised. (2) I.S. 456-2000 or latest revised. (3) I.S. 1893-2002, Part-1 to 5 or latest revised. (4) I.S. 875, Part - 1 to 5, 1987 or latest revised. (5) I.S. 10262 - 2009 or latest revised. (6) I.S. 13920 - 1993 or latest revised.

3.2	**Foundation**	- The foundation shall be design for actual SBC of soil strata confirmed by plate load bearing test. - The total Depth shall not be less than 1.0 m. Block foundation for pumping machinery over floor slab to be provided, as per relevant IS Code.
3.3	**Grade of concrete**	As per Latest IS code and as per Design
3.4	**Grade of Steel**	TMT 500 steel to be used
3.5	**Water Density**	9.81 kN/Cu.m
3.6	Live Load on the Pump Floor Level (kg/ sqm.)	500 kg/Sq.m
3.7	Live load for non accessible pump house roof (kg/sq.m)	75 kg/m^2
3.8	Column	Mini. 300 mm thickness (or as per Design)
3.9	Beam	Mini. 300 mm thickness (or as per Design)
3.10	Bottom Floor	Mini. 200 mm thickness (as per Design)
3.11	Top Slab	Mini. 150 mm thickness (or as per Design
3.12	Clear cover	Foundation-60mm Vertical Walls, beams, slabs-40 mm
3.13	Material handling arrangement	Chain pulley block minimum 1.0 MT capacity with girder or as per Design.
3.14	Flooring	32 mm Thick Kota stone Flooring
3.15	Window	Aluminum glazed Three Track sliding window with MS grill for Protection Purpose.
3.16	Rolling Shutter & Doors	MS Gear operated rolling shutter provided at Main Gate and at another 3.5 mm Wide Rolling Shutter As per approved Design.
3.17	Sanitation Facility	As per design and standard requirement
	(Toilet, Urinal, Sock Pit, Drinking Water Facility)	
3.18	Inside Plaster	20 mm thick CM 1:1.5 niru finished water proofing compound.
3.19	Outside plaster	15 mm thick CM 1:1.5 sand face.

3.20	Colour	2 Coat Weather Proof Exterior (Apex) paint with Primer should be applied. (Approved Brand) & Internal – Distemper of approved brand and quality
3.21	Grade of Concrete	RCC –M300
3.22	Steel	TMT Steel Fe- Confirming to Relevant IS
3.23	Arrangement for gantry	Necessary RCC brackets and insertion plates are provided as per requirement.
3.24	Minimum Reinforcement for all members	Design requirements as set out in relevant IS codes in respect of all Reinforcements shall be strictly followed.

Sign of Contractor

Executive Engineer
P. H. Works Division
Surat