

Name of scheme :-Dahisara IWSS

Taluka :- Bhuj

District :- Kachchh

Name of Work:

Construction of RCC U/G sump, Providing Supplying, Lowering, Laying & Jointing 140 mm dia and 90 mm dia PVC Pipeline, Construction of Pump Room for Dahisara Village, Tal. Bhuj under Rejuvenation Programme, YR 2025-26

:: SCHEDULE - B ::

Est. Qty	Unit	Item Description	Rate	Per	Amount in Rs.
1	2	3	4	5	6
		ITEM NO.1 RCC GSR (description of item turnkey tender) Preparing structural design of RCC under ground/partially under ground /above high ground level reservoir if required capacity as per relevant IS standards and constructing the same ,including excavation in all types of soil starta including rock including shoring strutting if required for loose soil/to protect from colapse casting 100 mm thick P.C.C leveling course in M-15 ,refiling the pit with proper soil and disposing of the surplus stuff at all lead including cement plaster in CM 1:2 with approved water proofing compound to all over inside container (i.e walls,base,top slab/dome bottam etc all)including at types of labour and material charages of lowering ,laying ,eracting /hosting and jointing of pipe assembly to inlet ,oulet overflow washout and bye pass arrangement as per hydraulic design .Providing and fixing accesscries ,CI manhole frame and cover water level indicator,adequater cowl type ventilators or lantern type ventilator with stainless steel jai.RCC chambers for valves providing and applying three coats of cement paint /snowcem to the out side face of structure.it a so includes sacisfactory water tightness test as per relevant I.S code and painting name of scheme and capacity on the tank as per oriection of engineer in charge.			
		List of Indian Standards for Design of GSR/SUMP-			
		The structural design of GSR shall be in accordance with provisions of			
		relevant Indian Standards			
		(1) I.S. 3370 part I & II 2009 or Its latest revision			
		(1.1) I.S. 3370 part III & IV 1965 or Its latest revision			
		(2) IS 456-2000 or Its latest revision			
		(3) IS 1893-2002-1984 or Its latest revision			
		(4) IS 875 part I to III,1987 or Its latest revision			
		General specifications:			
		(1) water depth in container shall be adopted as per data of tender .capacity shall be calculated excluding free board of the reservoir .If water depth is not specified the suitable water depth /acptable to field engineer in accordance with hydrulic			
		(2) shape of container (in plane) specified by in data shall be adopted in absance circular shape shall be adopted.			
		(3) size shall be fixed as per availability of space (land area)at site /acceptable engineer in charge.			
		(4) effect of overlaping of pressure bulbs of soil due near by stucture and proposed sump should be considered .			
		(5) care shall be taken that no damage should occur to nearby existing structure .comoensation shall be paid for the same by agency.			
		(6) The Min. concrete grade for RCC shall be M :30.			
		(7) HYSD(Fe 415)or higher grade reinforcing bars confirming to IS 1786/1139 or CRS /TMT bars shall be provide in saline atmosphere corrodion resistance stainless steel/HCR rebar shall be provide any other steel bar be used with approval of CE /in situatin of non availability in market without extra cost.			

		(8) Min. size/ thickness of various components shall be provided as per design criteria/specifications/IS Code (or as per std. Practice of G.W.S.S.B). Capacity of the ESR shall be considered excluding free board.Minimum dimensions specified for various components in tender data /specifications should be provided fail.			
		(9) The Safe bearing capacity (SBC) /allowable pressure on soil shall be referred from latest SBC test report or tender datasheet. During execution If poor soil strata or ground water table is encountered, the SBC shall have to be re ascertained and the design should be revised accordingly.no extra shall be paid for increase in quality.			
		(10) DI pipes and special shall be used it type ia not specified in tender			
		(11) The rate shall include cost of dewatering during execution making all arrangement when water table meets within depth.			
		(12) The structure shall be designed properly for uplift due to Ground water table specified in data or GWT encountered during excavation.if GWT/uplift is mentioned in tender and during excavation is does not meet 7.5% rate shall be revise No extra payment shall be paid for increse in quality.			
		(13) SS pipes railing shallbe provied over sump periphery when sump height >=1.5 meter above ground level			
		(14.a) RCC Staircase/RCC steps should be provided from GL to sump top slab based on the height oh the GSR above /below the ground			
		(14.b) RCC stair case with SS railing to be provide inside reservoir container BB masonary stair cabin with MS safety door having locking arrangement to be provide for GSR sumpp and HGLR of capacity more than 7.5 lakhs liter with top slab .if domw is consructed as top slab then provide minimum opening of 900 mm x 2000 mm with curbing and SS railing arornrc.			
		(15) appearance of structure should be aesthetically good looking acceptable to authority			
		(16) any change in size ,shape,depth,below GL ,height above GL ,water depth,F.B ,Size of member etc can be permitted in exceptional case due to site condition or hydraulic design requirement by C.E .No extra shall be paid for change.			
		(17)Any change in data ,dimentions,shapes,water depth,reduction in size if permitted by compotent authority end if is reduces quantity then payment shall be reduced prorate.			
		(18) when capicity of GSR/SUMP is >20 lakh liters two or suitable compartment acceptable to excutive engineer shall be designed and provided.			
		(19) Agency shall engage qualified (at least graduate)consulting engineer for designing the structure and he/she shall visit the site for guidance of work.			
		(20) 75 % part rate shall be payable for Concrete, Reinforcement and Plastering items of container until satisfactory hydraulic testing for water tightness is performed. Or as per tender condition. Till then the work shall be treated as incomplete.			
		Above conditions / general specifications Sr. No. 1 to 20 are part & of tender(contract) and prevail over other provisions in tender.			

		as above without water table(sub soil water below foundation)			
		for GSR (U/G sump)with cover slab to be constructed at site situated in seismic zone V,the above rates shall be increased by 2%			
1	No	3.00 lac liter sump capacity of GSR /SUMP	987045.53	No	987045.53
650	mtr.	Item No.2 Providing and supplying in standard length ISI mark rigid unplasticised PVC pipes suitable for potable water with ringfit joint including cost of rings, as per IS specification no. 4985/1988 including all local and central taxes, transportation, freight charges, octroi, inspection charges, loading, unloading, conveyance to the departmental stores and including cost of jointing material etc. complete. 140 mm dia 6 Kg/cm2 PVC Pipe	326	mtr.	211900.00
350	mtr.	90 mm dia 6 Kg/cm2 PVC Pipe	139	mtr.	48650.00
		Item No.3 Providing & Supplying P.V.C. Fittings suitable for P.V.C. Pipes at store or at site of work incl. freight, loading, unloading, stacking, insurance and all taxes etc. complete.			
3.00	No	PVC Tee (molded) 140 X 140 mm dia	679.00	No	2037.00
3.00	No	PVC Bend (Fabricated) 6.0 Kg 140 mm dia	1037.00	No	3111.00
4.00	No	PVC Bend (Fabricated) 6.0 Kg 90 mm dia	236.00	No	944.00
2.00	No	P.V.C Tee (moulded) 90 X 90 mm	324.00	No	648.00
4.00	No	P. V. C. Tail Piece with P. V. C. Flange (ISI)"Heavy duty (Moulded) 90 mm	236.00	No	944.00
		Item No.4 Providing and supplying ISI mark CI D/F Sluice Valves as per IS:14846(Latest Editon) of following class and diameter including all taxes,insurance, transportation, freight charges, octroi, inspection charges, loading, unloading, conveyance to departmental stores, stacking etc. complete			
2.00	No	125 mm dia Sluice valve PN 1.0 with ISI mark	4464.00	No	8928.00
2.00	No	80 mm dia Sluice valve PN 1.0 with ISI mark	2652.00	No	5304.00
		Item No.5 Providing and supplying ISI mark CI D/F Reflux Valves as per IS:5312(Latest Editon) of following class and diameter including all taxes,insurance, transportation, freight charges, octroi, inspection charges, loading, unloading, conveyance to departmental stores, stacking etc. complete.			
1.00	No	80 mm dia Reflux valve class I	3946.00	No	3946.00
1.00	No	80 mm dia Reflux valve class I	3946.00	No	3946.00
		Item No.6 Providing and supplying C. I. Temper proof Air valves with SS 304 Float gun metal- nozzle of approved make & quality of following class and diameter including all taxes, insurance,transportation, freight charges, octroi, inspection charges, loading, unloading, conveyance to departmental stores, stacking etc. complete. Without Isolating Sluice Valve PN 1.0 50 mm dia temper proof			
2.00	No		5499.00	No	10998.00
		Item No.7 Excavation for pipe line trenches incl. all safety provisions using site rails and stacking excavated stuff up to a lead of 90 mts. cleaning the site etc. complete for lifts and strata as specified.			
144.90	CuM	In all sorts of Soil	89.00	CuM	12896.10
85.05	CuM	In Hard Murrum	135.00	CuM	11481.75
211.05	CuM	In Soft Rock	163.00	CuM	34401.15
189.00	CuM	In Hard Rock	372.00	CuM	70308.00
		Item No.8 Lowering, laying and jointing PVC pipes and specials of following class and diameter including cost of conveyance from stores to site of works including cost of labour, material,except cement solvent, giving satisfactory hydraulic testing as per ISI code. 140 mm dia 6 kg/cm2 PVC Pipe			
650.00	Rmt		23.00	Rmt	14950.00

350.00	Rmt	90 mm dia 6 kg/cm2 PVC Pipe	17.00	Rmt	5950.00
37.57	Cum	Item No.9 Providing CC M:10 for encasing pipes using trap metal size 12 mm to 50 mm including form work curing consolidation etc complete for various location on pipeline ... By using trap metal 40 mm size	3368.55	Cum	126556.42
579.93	Cum	Item No.10 Refilling the pipeline trenches incl. ramming, watering, consolidating disposal of surplus stuff as directed within a radius of 3 km.	22.00	Cum	12758.46
2.00	No	Item No.11 Lowering, laying and jointing in position following C. I. / D/F Reflux valves, Butterfly valves, Sluice valves and Air valves including cost of all labour, jointing material, including nut bolts and giving satisfactory hydraulic testing, etc. complete. 125 mm dia sluice valve	479.00	No	958.00
2.00	No	80 mm dia sluice valve	400.00	No	800.00
2.00	No	80 mm dia Reflux valve	400.00	No	800.00
2.00	No	50 mm Air valve temper proof	379.00	No	758.00
5.00	No	Item No.12 Construction of valves chambers in brick or bela stone masonry, locally available in C. M. 1:6. Foundation concrete 150 mm thick in C. C. 1:4:8 of trap metal size 25 mm to 40 mm thick, inside cement plaster in C. M. 1:3 and cement pointing outside in C. M. 1:3 and top cover of precast RCC slab 100 mm thick (with key hole in two parts, each with handles or MS Bar etc. complete as given size) Upto 1 Mt. depth from G. L. to pipe invert level incl. complete civil works but excl. cost of excavation and refilling, with single piece 10 cm with M.H cover with 23 mm thick brick masonry wall in C.M.1:6 do with single piece 10 cm with fixing M.H. cover Size of Chamber 0.60 x 0.60 x 1.0 Mtr Deep	5138.00	No	25690.00
2.00	No	Item No.13 Erection of airvalve riser by installing new MS pipe of 6 mm thick and 3.2 mt length with necessary fittings such as flange of appropriate size, nut bolts and embeded the pipe in RCC M:15 with offset of 10 cm around pipe with necessary steel etc complete Dia of Airvalve 50 mm & MS pipes	3112.00	No	6224.00
1.98	Cum	Item No. 14 Excavation for foundation upto 1.5 m depth including sorting out and stacking of useful materials and disposing off the excavated stuff upto 50 Meter lead. Loose or soft soil	122.94	Cum	243.42
1.98	Cum	In Hard Murrum	267.08	Cum	528.82
1.63	Cum	Item No.15 Providing and laying cement concrete 1:3:6 (1-Cement : 3- coarse sand : 6- hand broken stone aggregates 40 mmnominal size) and curing complete excluding cost of formwork in (A) Foundation and Plinth (upto 10 ton)	3095.25	Cum	5045.26
4.02	Cum	Item No.16 Uncoursed Rubble Masonry with hard stone of approved quality in foundations and plinth in Cement Mortar 1:6 (1-cement : 6-coarse sand including levelling up etc. complete	2586.61	Cum	10398.17
2.46	Cum	Item No.17 Filling available excavated earth (excluding rock) in trenches. plinth, sides of foundations etc. in layers not exceeding 20 cm. in depth consolidating each disposed layer by ramming and watering.	136.92	Cum	336.82
0.24	Cum	Item No.18 Precast concrete block masonry (including quoin blocks jamb blocks closer etc.) with solid concrete blocks of approved size made of cement concrete 1:3:6 mix (1- Cement : 3 coarse sand: 6- graded stone aggregates of 20 mm and down grade) in foundation and plinth cement mortar 1:6	3771.97	Cum	905.27
5.46	Cum	For Super structure above plinth	4053.69	Cum	22133.15

6.00	Cum	Item No.19 Providing and laying cement concrete flooring 1:2:4 (1-cement : 2-coarse sand : 4-graded stone aggregate 20mm nominal size) laid in one layer and finished with a floating coat of neat cement. (B) 50mm thick	339.08	Sqm	2034.48
64.15	Sqm	Item No.20 Providing 15mm thick cement plaster in single coat on Rough (Similar)side of single or half brick walls for interior plastering upto floor two level and finished even and smooth in (i) Cement mortar 1:4 (1-cement:4-sand)	161.20	Sqm	10340.98
64.15	Sqm	Item No.21 Finishing wall with water proofing cement paint of on wall surfaces (Two coats) to give an approved brand and manufacture and of required shape even shade after thoroughly brushing the surface to remove all dirt and remains of loose powered materials.	60.80	Sqm	3900.32
120.00	Kg	Item No.22 Providing and fixing at site of work MS Door, Window etc with Rly freight, loading, unloading, carting & all taxes etc comp as drected including paints 2 coats etc compl	77.77	Kg	9332.40
8.50	Sqm	Item No.23 Providing corrugated G.I. sheet of class-3 roofing fixed with glavanished iron J or L Hooks, Bolts and nuts 8mm diameter with bitumen and G.I. limpet washer or G.I. limpet washer. filled with white lead complete excluding the cost of purlins, Rafters and Trusses.(1) 0.80 mm thick sheet	734.19	Sqm	6240.62
			Total Rs.		16,84,373.12

Signature of Contractor

Deputy Executive Engineer
P.H.S.Sub-Dn.
Bhuj - Kachchh.

Executive Engineer
P.H.Works-Dn.(G.W.S.& S.B.)
Bhuj-Kachchh