**SMT. G. G. KHADSE COLLEGE, MUKTAINAGAR, DIST. JALGAON-425306**

**SWIMMING POOL INFORMATION**

|  |  |  |
| --- | --- | --- |
|  | Main Pool | : 50m x 21m. |
| Size |  |  |
|  |  |  |
|  | Main Pool | : Depth 1.2– 2.0 m (deep end) |
| Depth |  | Avg; 1.6m |
|  |  |  |
|  | Rectangular. |  |
| Shape |  |  |
|  |  |  |
|  | 1730 m3. |  |
| Volume |  |  |
|  |  | |
| Type | Outdoor with overflow channel on two sides. | |
|  |  |  |
|  | 7 hours. |  |
| Turnover Period |  |  |
|  |  |  |
| Design Flow Rate | 290 m3/hr |  |
|  |  |  |
| Velocity Through the Filter | 40 m3/hr/m2 |  |
|  |  |  |
| Residual Chlorine to be | 1.5 – 2.0 mg/l |  |
| maintained |  |  |
|  |  |  |
| pH to be maintained | 7.2 – 7.6 |  |
|  |  |  |
| Balancing Tank | 100 m3. |  |
|  |  |  |

**Technical Specifications**

1. **Re-circulation Pump**

|  |  |  |
| --- | --- | --- |
| **Description** | | **Requirement suggested by technician** |
|  |  |  |
| Type |  | Self Priming Horizontal Monoblock pump |
|  |  | With prefilter basket attached |
|  | |  |
| Quantity | | 2 ( Two) |
|  | |  |
| Capacity of each pump | | 145 M3/hr |
|  | |  |
| Discharge head | | 12 meter maximum |
|  | |  |
| Total Shutoff Pressure of Pump | | 18 meter maximum |
|  | |  |
| Material Of Construction | |  |
| 1. | Body | PPO |
| 2. | Impeller | PPO |
| 3. | Shaft |
| 4. | Mechanical Seal | AISI – 304 stainless steel |
|  |  |
|  |  | Graphite/Ceramic |
|  | |  |
| Suction connection | | 6 “ as per DIN |
|  | |  |
| Discharge connection | | 6” as per DIN 2501 |
|  | |  |
| **Motor** | |  |
|  | |  |
| Power rating | | 380 V 3 phase 50 Hz |
|  | |  |
| Recommended Motor | |  |
| HP |  | 12.5 |
|  |  |  |
| **Price** | For Two pumps |  |
|  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **[2]** | **Pressure Sand Filter** |  |  |
|  |  |  | |
| Type |  | Anti – Corrosive Vertical High Flow Sand | |
|  |  | Filter (Name of company - ) | |
|  | |  | |
| Quantity | | 2 (Two) | |
|  | |  | |
| Diameter | | 2000 mm | |
|  | |  | |
| Material of construction. | | Fiber glass Bobbin Wound | |
|  | |  |  |
| Flow / Unit | | 155 | M3/hr(100m3/hr – 155 m3/hr) |
|  | |  |  |
| Total Flow | | 465 | M3/hr |
|  | |  | |
| Velocity / Filtration Rate | | 40 M3/hr/m2 | |



|  |  |  |
| --- | --- | --- |
| **Max Working pressure** | **2.5 kgs/cm2** | |
|  |  | |
| Test pressure | 6.0 kgs/cm2 | |
|  |  | |
| Max. Working Temp. | 50° C | |
|  |  | |
| Backwash flow / unit | 155 m3/hr | |
|  |  | |
| Backwash flow velocity | 40 M3/hr/m2 | |
|  |  | |
| Backwash time | 3- 5 minutes | |
| **PRICE for Two filters** | |  |
|  | |  |
| Type of Filtering media | | Silica Quartz Sand |
|  | |  |
| Size of Filter media | | 0.4 – 0.8 mm |
|  | |  |
| Depth of Filter media | | 1200 mm |
|  | |  |
| Quantity of filtering media per unit | | 3900 Kgs. |
|  | |  |
| Type of under bed | | Gravel (1- 2 mm) |
|  |
|  | |  |
| Size of gravel | | 1-2 mm |
|  | |  |
| Type of Inlet distributor | | Multi arm diffuser type made from |
|  | | unplasticised PVC and polypropylene |
|  | |  |
| Type of bottom collector | | Multi arm diffuser type made from |
|  | | unplasticised PVC and polypropylene |
|  | |  |
| **Sand Rate (Total Price)** | |  |



|  |  |  |
| --- | --- | --- |
| **[3]** | **Valve Battery** |  |
|  | |  |
| Type of Piping and Pipe fitting | | PN 10 flanged connections as per BS/ ISO |
|  |  | Standard (Name of company - ) |
|  | |  |
| Quantity | | 3 Sets. |
|  |  |  |
| Type of Valve | | Butterfly valve as per DIN standard |
|  |
| Size of valves | | 6 Inch |
|  | |  |
| Inlet/ outlet | | 6 Inch |
|  | |  |
| Backwash Inlet | | 6 Inch |
|  | |  |
| Backwash Outlet | | 6 Inch |
|  |  |  |
| Rinse |  | 6 Inch |
|  | |  |
| **TOTAL PRICE** | |  |
|  |  |  |

1. **Soda Dozing Unit and pH Dosing**

|  |  |
| --- | --- |
| **Pump** |  |
| Type | Constant Flow Membrane Pump (Name of company - |
| Quantity | 1 (One) |
|  |  |
| Capacity | 12 Liters / hr. |
|  |  |
| Discharge Head | 5 Kgs/ cm2 (g) |
|  |  |
| Material of construction. | All wetted parts are in Polypropylene, Viton, Teflon |
|  | and PVC. Pump shall be with anti acid plastic case. |
|  | Operating panel protection provided by transparent |
|  | polycarbonate cover. |
|  |  |
| Flow adjustment | By adjusting stroke length from 0- 100% manually |
|  |  |
| Power rating | 220 / 240 V 50 Hz |
|  |  |
| **Make** | **E-Dose** |
|  |  |
| **Tank** |  |
| Type | Cylindrical Vertical |
|  |  |
| Quantity | 1 (One) |
|  |  |
| Capacity / each tank | 100 liters |
|  |  |
| Material of construction. | HDPE |
|  |  |
| **Total Price for Two nos.** |  |
|  |  |

1. **Chlorine Dosing System**

|  |  |
| --- | --- |
| **Pump** |  |
| **Type** | **Constant Flow Membrane Pump** (Name of company - ) |
| Quantity | 2 (Two) |
|  |  |
| Capacity | 6 Liters / hr. |
|  |  |
| Discharge Head | 5 Kgs/ cm2 (g) |
|  |  |
| MATERIAL OF | All wetted parts are in Polypropylene, Viton, |
| CONSTRUCTION. |
|  | Teflon and PVC. Pump shall be with anti acid |
|  | plastic case. Operating panel protection |
|  | provided by transparent polycarbonate cover. |
| Flow adjustment | By adjusting stroke length from 0- 100% manually |
|  |  |
| Power rating | 220 / 240 V 50 Hz |
|  |  |
| Protection | IP 65 protection |
|  |
| **Make of Pump** | **E-Dose** |
|  |  |
| **Tank** |  |
| Type | Cylindrical Vertical |
|  |  |
| Quantity | 1 (One) |
|  |  |
| Capacity / each tank | 100 liters |
|  |  |
| Material of construction**.** | **HDPE** |
|  |
| **Total Price for Two nos.** |  |
|  |  |

1. **POOL BASIN ITEMS a. Main Drain Grates**

|  |  |
| --- | --- |
| Quantity | 4(Four) |
|  |  |
| Flow per drain | 50 M3 /hr |
|  |  |
| Velocity | 0.5 m/sec through the grille |
|  |  |
| Total flow | 200 M3/hr |
|  |  |
| Suction grill size | 500 mm x 500 mm |
|  |  |
| Grill fixed with | SS. Screw |
|  |  |
| **Total PRICE** |  |
|  |  |
| **b. Floor Inlets** |  |
|  |  |
| Quantity | 104 |
|  |  |
| Flow capacity / inlet | 5000 LPH |
|  |  |
| Material of construction. | ABS Plastic |
|  |  |
| Outside connection | 2” BSP (M) |
|  |  |
| **Total Price for 104 units** |  |
|  |  |

**c. Suction Inlet with PVC Conduits**

|  |  |
| --- | --- |
| Quantity | 6 sets |
|  |  |
| Flow capacity / inlet | 9000 LPH max. |
|  |  |
| Material of construction. | ABS Plastic |
|  |  |
| Outside connection | 2” BSP (M) |
|  |  |
| **Total PRICE for Six units** |  |
|  |  |

1. **POOL SIDE ITEM a. Ladders 5 /4/3step**

|  |  |  |  |
| --- | --- | --- | --- |
| Type | Overflow ladder without welded joints and treads. | |  |
| Quantity | 2 Nos. each |  |  |
| Steps dimensions | 500 mm x 75 mm thick | |  |
| Type of step | Non –Slip step |  |  |
| No of steps | 5 (five) |  |  |
| Handrail dia | 43 mm pipe |  |  |
| Steps | Stainless steel |  |  |
| Material of construction. | AINSI – 304 |  |  |
| Center to center of steps | 280 mm |  |  |
| Type of fixing | Wall support fixing | |  |
| Accessories | Fixing anchors and electrical earthing connection | |  |
| **Total PRICE 2 STEP (2each)** |  | |  |
|  |  |  |
| **Total PRICE 3STEP (2each)** |  | |  |
|  |  |  |
| **Total PRICE 5 STEP (2each)** |  | |  |
|  |  |  |
| **b. Grating** |  |  |  |
|  |  |  |  |
| Type |  | **Flexible Ribs Type** |  |
|  |  |  |
| Quantity |  | 142 mts |  |
| Grating Width |  | 300 mm |  |
| Height |  | 23 mm |  |
|  |  |  |  |
| Fixing to Two Grating |  | Male – Female Connection |  |
| Center to Center between two grating | | 8 mm as per International standards |  |
| Material Of Construction |  | **UV Stabilized Polypropylene** |  |
|  |  |  |
| **Total PRICE for 142 units** |  |  |  |
|  |  |  |
|  |  |  |  |

**8] SWIMMING POOL ACESSORIES.**

**A. Vacuum Head**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Quantity | One |  |  |
|  | Type | **2.5 ft SS 304** | | |
|  |  |
|  | Material of | Brightly polished SS. To be towed with cable. With 1 | | |
|  | construction | connections | | |
|  | Connection | 1.5 inch Clip | | |
|  | **PRICE** | **Rs** | | |
| **B. Handle** | |  |  |  |
|  |  |  |  |  |
|  | Quantity |  |  | One |
|  |  | |  |  |
|  | Material of construction | |  | **Reinforced Aluminum** |
|  |  |  |  |
|  |  |  |  |  |
|  | Type |  |  | **Telescopic** |
|  |  |  |  |
|  |  |  |  |  |
|  | End connection |  |  | Clip adaptable to all accessories |
|  |  | |  |  |
|  | Total length of handle | |  | 9 meter |
|  |  |  |  |  |
|  | **PRICE** |  |  |  |
|  |  |  |  |  |
| **C. Vacuum Hose** | |  |  |  |
|  |  |  |  | |
|  | Quantity |  | 60 meters | |
|  |  | |  | |
|  | Material of construction. | | EVA Transparent, GREY copolymer | |
|  |  |  |  | |
|  | Size |  | 1.5” | |
|  |  |  |  | |
|  | **PRICE** |  |  | |
|  |  |  |  |  |

**D. Deep Bag Net**

|  |  |
| --- | --- |
| Quantity | One |
|  |  |

|  |  |
| --- | --- |
| **Material of construction** | **Polypropylene and white polyester** |
|  | **netting** |
|  |  |
| End connection | 11/2” CLIP connection |
|  |  |
| Dimension | 395 mm x 420 mm deep bag |
|  |  |
| **PRICE** |  |
|  |  |
| **E. Shallow net** |  |
|  |  |
| Quantity | One |
|  |  |
| **Material of construction** | **Polypropylene and white polyester** |
|  | **netting** |
|  |  |
| End connection | 2” CLIP connection |
|  |  |
| Dimension | 300mm x 397 mm with 1300 mm stem |
|  |  |
| **PRICE** |  |
|  |  |
| **F. Curved Brush for pool basin and scum liners** | |
|  |  |
| Quantity | One |
|  |  |
| **Material of construction** | **Polypropylene and aluminum** |
|  |  |
| End connection | Clip connection |
|  |  |
| Total length of brush | 18 INCHES |
|  |  |
| **MODEL** |  |
|  |  |

**G. Algae Brush for Pool basin and scum liner**

|  |  |
| --- | --- |
| Quantity | One |
|  |  |
| **Material of construction** | Aluminium back with Stainless steel bristles |
|  |
|  |  |
| End connection | Clip connection |
|  |  |
| Total length of brush | 9 INCHES |
|  |  |
| **MODEL** |  |
|  |  |

**H. Test Kit**

|  |  |
| --- | --- |
| Quantity | One |
|  |  |
| **PRICE** |  |
|  |  |

**9] SWIMMING POOL PIPING AND PLUMBING ACESSORIES.**

|  |  |
| --- | --- |
| Quantity | One Job |
|  |  |
| Pool Piping and Plumbing Work | All 10 kg per cm sq. ISI marked Upvc pipes |
|  | and fittings. |
|  | All lines are provided with high quality heavy |
|  | duty fittings and required ball valves, non |
|  | return valves PN 6 TO 10 rating etc complete. |
|  |  |
| **TOTAL PRICE** |  |
|  |  |

**11] ERECTION, TESTING & COMMISSIONING OF SWIMMING POOL.**

|  |  |
| --- | --- |
| Quantity | One Job |
|  |  |
| Erection,testingand | Complete installation, testing & |
| Commissioning | commissioning of equipments as mentioned in |
|  | above B.O.Q. and testing & commissioning of |
|  | swimming pools including external piping |
|  | work and Swimming Pool Accessories. |
|  |  |
| **TOTAL PRICE** |  |
|  |  |

**12] Suction Sweeper Pump:**



|  |  |
| --- | --- |
| **Description** | **Required** |
|  |  |
| Type | Self Priming Horizontal Monoblock pump |
|  | Suction Sweeper Pump  (Name of company - ) |
|  |  |
| Quantity | 1 ( One) |
|  |  |
| Capacity of each pump | 145 M3/hr |
|  |  |
| Discharge head | 12 meter maximum |
|  |  |
| Total Shutoff Pressure of Pump | 18 meter maximum |
|  |  |
| Suction connection | 2 “ as per DIN |
|  |  |
| Discharge connection | 2” as per DIN 2501 |



|  |  |
| --- | --- |
| **Motor** | (Name of company - ) |
|  |  |
| Power rating | 380 V 3 phase 50 Hz |
|  |  |
| Recommended Motor |  |
| HP | 2 |
|  |  |
| **TOTAL Price for Two pumps** |  |



R/Sir,

You are requested to give the Quotations as per above requirements which are suggested by our technician as early as possible.