3

INSTRUCTIONS TO BIDDERS

1. <u>Brief Scope of Work.</u> The work involves Repairs and Re-Development of the existing swimming pool including baby pool (splash pool), at Salwan Public School, Sector 15 Part II, Gurugram 122 001, of size 25m x 13m so as to raise the bed level of Swimming Pool in order to reduce the water depth of the Swimming Pool along with repair of balancing tank, deck area, water proofing, associated infrastructure of pipe lines, repairs of filters, filtration plant – pumps and system, drainage and to redevelop as per items of work, drawings and specifications attached with this tender. The repair and redevelopment shall be as per items of work specified in the schedules, specifications and tender documents. Completion time is four (04) months from the date of award of work.

2. <u>TIMELINES.</u>

Dates & Time For		Date and Time
Date of NIT & publishing of Instructions to Tenderers, on website	•	18 Oct 2023
Tender Document publishing date on Web site.	•	18 Oct 2023
Tender Document download Start Date	•	18 Oct 2023
Pre-Bidding Meeting (if required by bidders)	•	26 Oct 2023 at 1400h at site
Bid Submission Date & Time	•	22 Nov 2023 (1300h)
Date & Time of Opening of Bid	•	22 Nov 2023 (1500h)

3. Tender Document Acquisition.

- 3.1 Bidders have following two options for obtaining the tender document: -
- **3.1.1** Option-1. The tender document can be downloaded from Salwan Public School, Gurugram website i.e., https://www.salwangurgaon.com/tenders

Signature of SPS Gurugram Representative with date

Signature of Bidder or his Authorised Representative with date 75

	Part- V : A2 : Schedules & Items of Works : REVISED								
	Name of Work : Repairs and Re-Development of the Swimming Pool BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023								
Ser No.	Ser Descripition of items Unit Quantity Rate (Rs) Amount (Rs)								
1	SITC of Filters Vessels								
	Supply, installation, testing & commissioning of swimming pool vertical bobbin wound filter 1200mm dia with side mounting for MPV with filteration velocity 40m3/h/m2, Flow 50 m3/hr capacity 2.5Kg/Sqcm Connection min conection size 75 mm inclusive of all foundation, piping, pipe fittings and pre filteration as per site condition, Warranty minimum 10 years on company's letter head as directed by Engineer-in- charge including all Labour & Materials etc complete. Make: Astral Spain/ Pentair/ Certikin/ AqvaStar	Nos.	2						
2	Supply & Commissioning of Filter Media Sand 0.42 - 0.8 mm/ Silica glass as per filter manufacturer specifications. Make: ESCEM / Indigenous	kg	2400						

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023							
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)			
3	Supply, Testing & Commissioning of Installation (SITC) of CIRCULATING PUMPS (2 No. Working + 1 No. Standby) Supply, installation, testing & commissioning of monoblock Pump (5 HP pump / 3 Phase) 440 V, Flow: 50 m3/hr @ 12m head for vertical filter of dia 1200 mm to achive filteration velocity: 35m3/h/m2 inclusive of all pre filtration, foundation, piping, pipe fittings as per site condition, Warranty minimum 5 years, on company's letter head from Country head as directed by Engineer-in- charge including all Labour & Materials etc complete. Duty - 2 Nos and Stand by - 1 No. Make: Astral Spain/ Pentair/Certikin/ AqvaStar	Nos.	3					

Rejedendal

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023							
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)			
4	SITC of CENTRALISED PUMP ELECTRIC CONTROL PANEL Integrated, cubical type, 16 SWG powder coated CRCA sheet control panel to mounted to the foundation. The control panel should be suitable for 440 volts, 50 Hz, 4 wire supply. Quoted price shall include with 25mm thick rubber mats, wiring, cabling, control wiring and copper grounding from control panel to various equipment like recirculation pump, dosing equipment, agitator etc. The panel shall have compartment for bus bar and cable alleys. The panel should be in accordance with the specifications. Providing and fixing necessary cables, internal wiring for all equipments and power cabling for motors, dosing systems, controller etc. Control panel should consist of Ammeter, Volt meter, Selector Switch, Single phase preventer etc. Cost should be included in the cost of M.C.C. etc. complete. Make - ESCEM / Indigenous. All components of the control panel to be of L&T make.	Nos.	1					
5	Supply, installation, testing & commissioning of Multiport valve for 1200mm dia vertical bobbin wound filter side mounted MPV 75 mm, inclusive of all piping, pipe fittings as per site condition. Warranty minimum 10yrs on company's letter head from Country head as directed by Engineer-incharge including all Labour & Materials etc complete. Make: Astral Spain/Pentair/Certikin/AqvaStar	nos.	2					

	BOQ- Swimming Pool Electro	mechanical V	Vorks : A2 : RE	VISED : 16 Nov 2023	
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)
6	Supply, installation, testing & commissioning of plumbing works in uPVC Schedule 40, with allied fittings & Valves as per site requirement with ASTM standards, as directed by Engineer-incharge including all Labour & Materials etc complete. Make: Astral / Supreme / Prince	LS	1		
7	Chlorination and Disinfection	Nos.	02		
	DOSING PUMP for Chlorine & pH Correction: Supply, installation, testing & commissioning of chlorine dozing pump of capacity 20 LPH @ 5 bars for filter bobbin wound of 1200mm with filtration velocity: 40m3/h/m2, Flow: 50 m3/hr inclusive of all piping, pipe fittings as per site condition, electrification from panel to chlorine dozing pump etc. Warranty minimum 5 years, as directed by Engineer-in-charge including all Labour & Materials etc complete. Make: Astral Spain/ Pentair/ Certikin / AqvaStar				
7A	UV Disinfection System The UV system radiation with a wavelenth of 253.7 mm, ensuring a lethal effect on bacteria. Max flow rate 25m3/hr, uv lamp 130 w with inlet & out let union connections. Make: Astral Spain / Pentair / Centrikin / Aqva Star / Pool Aids / Blue Lagoon	Nos	4		

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023								
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)				
8	SOLUTION PREPARATION TANK								
	Semi transparent high density polyurethalene tank with external scale marked with levels capacity of tank 100 lts. (1 no. each for chlorine and Acid/ Soda Ash). Make: Sintex / Astral Spain / Pentair / Centrikin / AqvaStar	Nos.	02						
9	STIRRING ROD								
	Manual Agitators for easy installation in the tanks, provided with steering grip in bakelite, rod and propellor arms in PVC, length of stirring rod 600mm. (1 No. each for chlorine and Acid/Soda Ash). Make: Astral Spain / Pentair/ Certikin / AqvaStar / Pool Aids	Nos.	02						
10	COMMISSIONING CHEMICALS : Make: Indigenous								
(a)	TCCA 90	Kgs	50						
(b)	Non Ferric Alum	Kg	250						
(c)	Copper Sulphate in bag	Kgs	25						
(d)	Acid HCL 33%	100	Litres						

	BOQ- Swimming Pool Electro	mechanical W	Vorks : A2 : RE	VISED : 16 Nov 2023	
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)
11	SUCTION SWEEPER ASSEMBLY				
(a)	Supply & trial run of Stainless Steel (SS Grade 304) Suction sweeper head lenghth 600 mm pipe connection 2/1-1/2" size trailed via Aluminium Telescopic Pole. Make: Astral Spain / Pentair/Certikin/Pool Aids	Nos.	1		
(b)	Supply and trial test of TELESCOPIC HANDLE in anodized aluminium which can be adapted to the entire range of cleaning equipment, brushes, deep net with butterfly connection 4.8 to 9.6 m m Long. Make: Astral Spain / Pentair / Certikin / Pool Aids	Nos.	1		
(c)	Supply and Trial Test of FLOATING HOSE (Suction Hose): Plastic vacuum hose 2" dia, 30 mtrs long with cuffs well adaptable to the Vacuum Head via hose clamp in Galvanised Steel. Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids	Nos.	1		
(d)	Supply and Trial Test of DEEP BAG NET Deep bag net made in polypropylene and white polyester netting with wing-nut connection and to be able to be connected to the telescopic handle supplied as per specifications. The deep net should be at least 300 mm wide. Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids	Nos.	1		

Rojedyndal

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023								
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)				
(e)	Supply and Trial Test of CURVED BRUSH: Curved brush made in polypropylene for pool basins and scum liners with wing - nut connection.and to be able to connected to the telescopic handle supplied as per specification. The length of curved brush bristles should be atleast 450 mm long/wide.Make: Astral Spain/ Pentair / Certikin / Pool Aids	Nos.	1						
(f)	Assembling and Trial Testing of TROLLEY MOUNTED PUMP: Powder Coated in siemens grey trolley made in fabricated mild steel mounted on nylon wheels of min. 150 mm Dia. & Min. 2 Nos. with bottom support. The trolley should be able to bear the load of 2 HP self priming pump of suction delivery size 50 NB X 50 NB, 2.5 Sq. mm 3 core cable insulated unarmoured cable min. 30 m 2 HP DOL starter should be provided with pump. Make: Astral Spain / Pentair / Certikin / Aqvastar / Kirloskar	Nos.	1						

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023							
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)			
12	POOL BASIN ITEMS							
(a)	SITC of MAIN DRAIN: SS 304 Square main drain 450mm x 450mm with main frame screwed on base frame also in SS 304 duly groutable on the pool bottom deepest part. The drain plate should be able to collect a water volume of not less than 35 M3/hr @ a drain velocity of 1.0 m/sec. The hole size on drain plate not to exceed 10 mm and qty of holes to match the said flow. Make: Astral Spain/ Pentair/Certikin/ AqvaStar / Pool Aids	Nos.	2					
(b)	SITC of FILTERED WATER FLOOR INLET: Concrete floor inlet with ss screw flow 12 m3/hr with 2" female and male connection. Make: Astral Spain/ Pentair/ Certikin / AqvaStar / Pool Aids	Nos.	20					
13	SITC of UNDERWATER ILLUMINATION							
(a)	Standard Underwater light in LED 24 W x 12 V DC in white ABS rim / SS rim, niche inpolypropylene with 2.5 meter cable with Guarantee one year. Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids	Nos.	14					
(b)	SITC of Deck Box in ABS with 3 entries of 3/4" Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids	Nos.	14					

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023							
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)			
(c)	SITC of Flexible conduit hose 1 m long for connecting light to the box. 3/4" and M25 threaded ends, for lights (with cable). Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids	Nos.	14					
(d)	SITC of Low voltge swimming pool transformer with protective shield between primary & secondary windings, internal protection against overload, 200 W, 230 V primary and and12 V secondary voltage with tappings for different cable lengths. Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids	Nos.	4					
14	Supply, installation, testing & commissioning of electrical works in pool basin & filteration plant room with allied piles, fittings, cables, accessories etc as per site requirement with ASTM standards, as directed by Engineer-in-charge including all Labour & Materials etc complete including supply, installation, fitting of 25 mm / 40 mm PVC conduit pipe of heavy duty, with 2 core 2.5 sq mm copper cables for light points, 3 core 4 sq mm copper cables for panel to pumps, 4 core from Main power supply upto panel. Electric cables shall be of Make Polycab / Havells / Finolex of grade FLRS-LH.	LS	1					

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023							
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)			
15	LADDER							
(a)	4 Steps: SITC of Loop model stainless steel AISI-304 ladders with added top double safety step width: 500mm, handrails dia 42mm stainless steel 16 gauge, non-slip chequered footsteps of minimum 16 gauge, provided with earth connection and anchoring fixtures, No. of steps - 4, including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineerin charge. Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids Note: This item is in lieu of Item No 44 of Schedule A1.	Nos.	2					

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023								
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)				
(b)	3 Steps: SITC of Loop model stainless steel AISI-304 ladders with added top double safety step width: 500mm, handrails dia 42mm stainless steel 16 gauge (minimum), with non-slip chequered footsteps of minimum 16 gauge, provided with earth connection and anchoring fixtures, No. of steps - 3, including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing with necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in charge, including of fixing accessories such as nuts, bolts, fasteners etc.). Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids. Note: This item is in lieu of Item No 43 of Schedule A1.	Nos	2						

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023						
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)		
140.							
16	OVERFLOW GUTTER GRATINGS						
	Supply & placement of over flow grating 300-305mm wide & 25mm in depth made of ABS, chemical resistant with UV protection including support profile, hardware etc. Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids. Note: This item is in lieu of Item No 42 of Schedule A1.	R. Mtr	85				
17	Supply and trial test of (i) Life Buoys ring for pool safety. The same to be mounted near the Swimming Pool as per the Safety Requirements. Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids	Nos	2				
18	Supply and trial test of (ii) Lifeguard Loop and placed near the pool area as per the safety requirements Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids	Nos	2				
19	Supply of (iii) Artificial Respirator (Ambu Bag) Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids	Nos	2				

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023						
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)		
20	DELETED						
21	Heat Pump - Providing, fixing, testing and commissioning of Heat pumps using energy heat source from ambient air to Hot water, of High efficiency and energy saving operation, capable of heating and maintaining water temperature in swimming pool between 26°C to 29°C with silent operation (the sound level should not exceed 65dB). The Heat Pump shall have LCD display control panel with builtin diagnostic and troubleshooting information and an inbuilt cycle for defrosting in case icing occurs one vaporator including all other mounting, fitting and controls, all interconnecing wiring/cabling between heat pump and electric panel etc complete in all repsect with but not limited to following specifications:	Nos.	2				

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023					
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)	
	Heating Capacity - 91 kW					
	Hot water rated ouput volume - 28 m3/Hr					
	Power Supply V/Ph/Hz : 400~440V/3 PH/50Hz					
	Ambient temperature range in Deg C : -5 °C~43 °C					
	Type of Fan : Low Noise axial fan					
	Suggested Noise level: DBA <63					
	Make: Astral Spain/ Pentair/ Certikin/AqvaStar					
	Note: Provision of item of Heat Pump is optional. Its supply, installation and commissioning will be decided by the school authorities later.					
21A	All plumbing items like valves, flange, electrical items civil works items to facilitate installation and commissioning of Heat Pumps at any later date. Rates must be quoted for all items for supply, installation, plumbing, electric works etc for the heat pumps but not for heat pumps.	Lump Sum	1			
21B	Control Panel for Heat Pumps Make ESCEM / Indigenous. All Components to be of make L&T.	Nos	1			
22	Material and Labour for testing, servicing /repairing and commissioning the existing filtration plant complete with filter media, chlorometer etc. and integrating it with the newly laid pipelines can be checked/inspected at site.	Job	1			

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023						
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)		
23	Bubble Pool Cover for main pool Make : AqvaStar	Sqm	325				
24	Bubble Pool Cover for baby / kids/splash poolMake : AqvaStar	Sqm	36				
25	SS Pool cover roller 6.0 to 6.5 mtrs wide for main pool Make : AqvaStar	Nos	4				
26	SS Pool cover roller 6.0 to 6.5 mtrs wide for baby pool Make : AqvaStar	Nos	1				
27	Providing and fixing standard height 400 mm height starter Blocks made of Stainless Steel grade 304, With 500 x 500 mm FRP Footrest as per FINA standard. Make: Astral Spain / Pentair / Certikin / AqvaStar / Pool Aids. Note: This item is in lieu of Item No 40 of Schedule A1.	Nos	5				

	BOQ- Swimming Pool Electromechanical Works : A2 : REVISED : 16 Nov 2023						
Ser No.	Descripition of items	Unit	Quantity	Rate (Rs)	Amount (Rs)		
28	Supply, Installation, Commissioning & fixing standard lane divider with fixing arrangements of 25 m length made of 150 mm antiwave of high quality, chemical resistant, UV stabilised plastic, in colour / design as per approved sample, with deck anchor, lane post, lane tightner and rope tightener etc as per FINA standards. Make: Astral Spain / Pentair / Certikin / Aquastar / Poolaids. Note: This item is in lieu of Item No 41 of Schedule A1.	Nos	5				
	Total for Electromechanical Works (Rs)						

Rejulyadal