

**Brief Specifications of civil works for proposed Swimming pool at  
Yadavindra public school patiala**

**Part -1** Swimming pool (25 M x 50Mx 1.35 to 2m)

**Part -2** Gym +Changing Block + Balancing Tank + Filtration plant

**Part-1**

**Swimming pool**

- Foundations of R.C.C. Swimming Pool consist of Raft foundation 200mm thk & R.C.C. wall 300 thk with over flow gutter as per drawing. Concrete mix M-30 grade.
- All Excavated earth of pool area shall be disposed off in the school campus free of cost.
- P.C.C. 150 thk (1:4:8) over compacted earth Consist of concrete hand cut stones of 3" average size + Cement & Sand filling. After Excavation of foundation concrete bed of 150 thk M-15 (1:2:4).
- Waterproof coating of k10 damp flex of Pares Group "sika brand" shall be applied (as per manufacture instruction ) on all inner or outer surfaces of RCC raft RCC walls and RCC gutter to check any cracks and in concrete including injection grouting.
- Deck area Grade slab 8" thk finished with Floor vitrified Tile anti-skid 30cmx30cmx1cm max grip of Johnson brand.
- For drainage of Deck area 6" dia pipe with gully traps as shown in drawing
- Boundary Wall around deck area shall be brick walls with R.C.C. columns as per drawing.
- Overflow drain with pvc grating shall be provided, Grating shall be of pvc
- To achieve good quality of concrete grade, mini R.M.C. plant will be setup by the contractor
- All pipe work of swimming pool related to filtration plant shall be in the scope of contractor of filtration plant.

## **Part-2**

### **Gym + Changing Block + Balancing Tank + Filtration plant**

#### **Basement Floor for filtration & balancing tank**

- Excavation of balancing tank & Filtration plant shall be done as NBC code in view keeping Angle of repose All water proofing work should be a coating of k10 damp flex of pares group "sika brand" applied (as per manufacture instruction ) on all inner or outer surface of RCC raft RCC walls and RCC gutter to check any cracks and in concrete pool area including injection grouting.
- Excavation Foundation of toilet block & Gym block shall be bricks & RCC foundation beam & Plinth beam
- Walls – RCC walls with column grade slab RCC roof slab.
- Finishes of balancing water proofing .
- Finishes of Filtration Room with Cement plaster internal + Acrylics Paint.
- Floor – kota stone over Grade Slab.
- Door/Window- Aluminum 14-gauge tubular section, Jindal Make.
- Staircase- RCC + M.S railing.
- S.S. Rungs 2'-0"wide @300c/c in balancing tank.
- Steel Reinforcement Work : The steel shall be (TATA Steel, Grade Fe500) placed as per structural working drawings provided by the Architect / Structural Consultant.
- All shuttering to be used for concrete work shall be of Steel Plates & all scaffolding work shall be of M.S. pipe system.
- Pump Foundation – R.C.C foundation as per manufacture dwg.

#### **Toilets & Changing Area**

- All Light Partition in changing / toilet block shall be of stylum fiber board 20mm thk partitions a per drawing.
- External Finishing : The building shall be finished externally with cement plaster as per elevation then painting work as per specified.
- Aluminum door & window 14-gauge tubular section, polyester powder coating = 50 micron of approved shade. Panel shall be stylumn fiber board 6mm thick

- Floor Tile 2'-0" x 2'-0" anti skid matt finished and dado tile 2'-0" x 1'-0" of (Johnson make).
- W.C - Hindware Italian range wall hang W.C. Code no. 20040(P-22.2)
- Counseled flushing system of jaquar make.
- Wash basins - Hind ware Italian range over the Counter Code no.91096
- Urinals –Hindware code no.96004

## **Gym block**

- Aluminum door & window 14-gauge tubular section polyester powder coating = 50 micron of approved shade. Panels shall be stylumn fiber board 6mm thk.
- Flooring 2'-0 x 2'-0" vitrified (matt finish double charged (Johnson make).

### **PLUMBING APPROVED MAKES**

Piping System	Supreme UPVC/ CPVC pipes for all fixtures and sanitarywares. All pipes shall be painted with 2 coats of Synthetic Enalel Paint over a coat of Primer
Mirror	Mirror with 12mm thk Boiling Water Proof Plywood <b>[In Toilets]</b>
Underground Drainage Pipes	Supreme UPVC Pressure Pipes, Class 4 (PN) 8kgf/sqcm
Cold & Soft Water Line	Supreme 'PP-R' SDR-6 (PN 20)
Water Supply Line	Supreme 'CPVC' SDR-11 as per IS 15778
Vertical Drainage Pipe	Supreme S.W.R. Drainage Pipe 'Type-B' as per IS 13592 - 1992
Water Closet	545 X 345 X 360mm, Hindware Enigma Star White
Wash Basin	580 X 430mm, Hindware Garnet Star White

Urinal	310 X 370 X 640mm, Hindware Enigma Star White
Concealed Cistern	Jaquar with Nova Flush Plate
C.P. Fittings	Jaquar make
External Sewerage Works	As per Specifications of PWD and B&R
Overhead Tanks	Multilayered Sintax or Supreme (2000 ltrs.) along with connecting pipe
Rain Water Disposal	UPVC Pipes (4 kg Pressure)
Chinaware Fittings	Hindware
Sewerage Disposal Pipes	UPVC Pipes (6 kg Pressure)

#### **ELECTRICAL APPROVED MAKES**

Electrical Switches	Havels
M.C.B. & D.B. ; E.L.C.B.	Havels
Electrical Wires ; Telephone & TV Cables	Havels, Finolex
P.V.C. Conduits	Diplast, Polyindia
Speakers	Ahuja, Phillips
Industrial Sockets	Legrand, L&T, GE
Connections/ Joints	Water Tight and Sealed using M.S. Jointing Compound
Armed Cable	Havels

### **LIST OF APPROVED MAKES**

1. R.M.C.	Ambuja/A.C.C./Ultra tech 43g OPC
2. GREY CEMENT	Ambuja/A.C.C./Ultra tech 43g OPC
3. WHITE CEMENT	JK
4. STEEL BARS	TATA
5. ANTI TERMITE CHEMICAL	FOSROC CHEMICAL ( INDIA ) LTD.
6. WATER PROOFING MIX	K10 Damp flex (Parex Group)
7. PLASTICISER	SIKA
8. P.O.P. WORK	ADHAAR SHRI
9. GRID FALSE CEILING	ARMSTRONG
10. FLUSH DOORS	CENTURY or GREEN
11. CLEAR FLOAT GLASS	SAINT GOBAIN
12. DOOR CLOSER	DORMA
13. HARDWARE	AKS / SS 304 GRADE
14. UPVC PIPES & FITTINGS	SUPREME/ PRINCE
15. CPVC PIPES & FITTINGS	SUPREME
16. SANITARY WARE	HINDWARE Italian range
17. CONCEALED CISTERN	JAGUAR
18. FASTNERS	HILTI

19. C.P. FITTINGS	JAQUAR
20. ELECTRICAL SWITCHES	HAVELS
21. ELECTRICAL WIRES	HAVELS , FINOLUX
22. TELEPHONE & T.V. CABLES	HAVELS , FINOLUX
23. P.V.C. CONDUITS	DIPLAST, POLYINDIA
24. M.C.B. & D.B.	HAVELS
25. E.L.C.B.	HAVELS
26. SPEAKERS	AHUJA , PHILLIPS
27. INDUSTRIAL SOCKETS	LEGRAND, L&T, G.E.
28. RISING MAINS	L & T, SCHNEIDER, G.E.
29. PANEL MANUFACTURER	
30. TEXTURE PAINT	SPECTRUM PAINTS PVT. LTD.
31. PLASTIC EMULSION	NEROLAC, ICI DULUX, ASIAN
32. VITRIFIED TILE	JOHNSON
33. ANTI-SKID TILE	JOHNSON ENDURA
34. Pool tile	JOHNSON