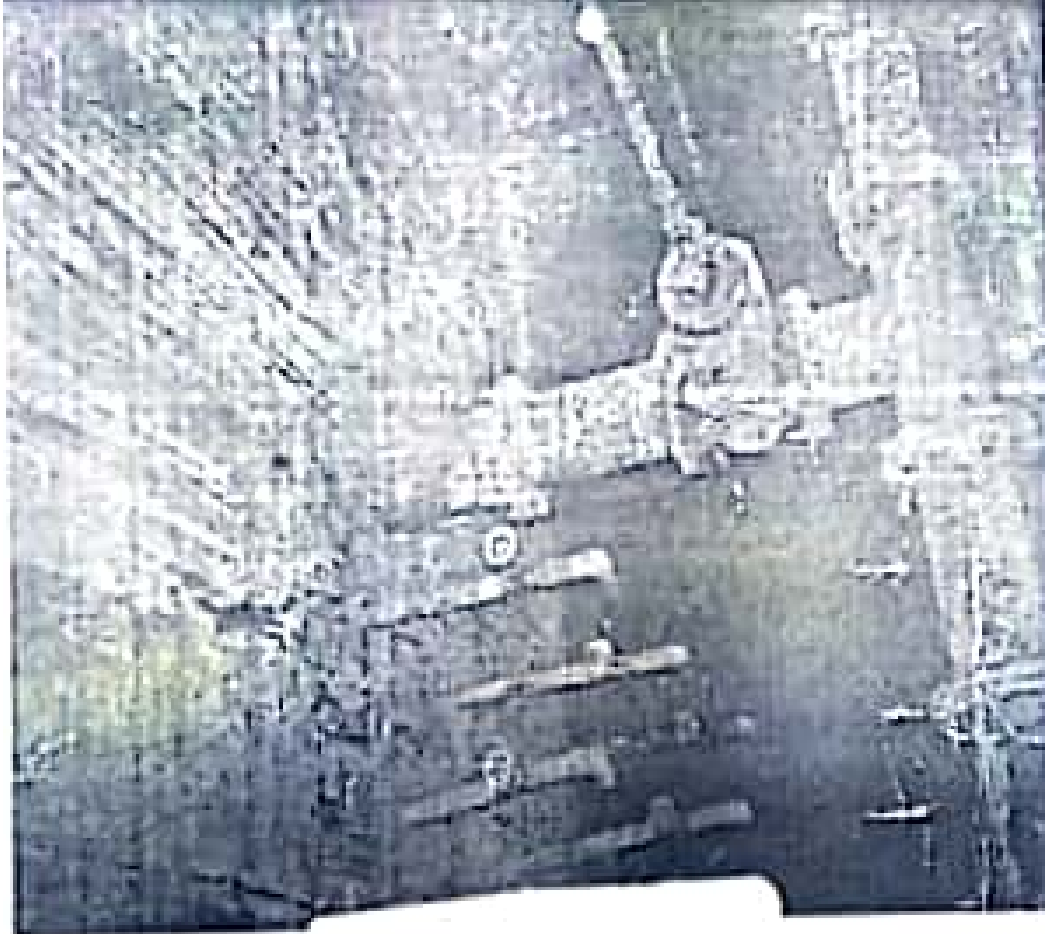




### Filtrate Sump

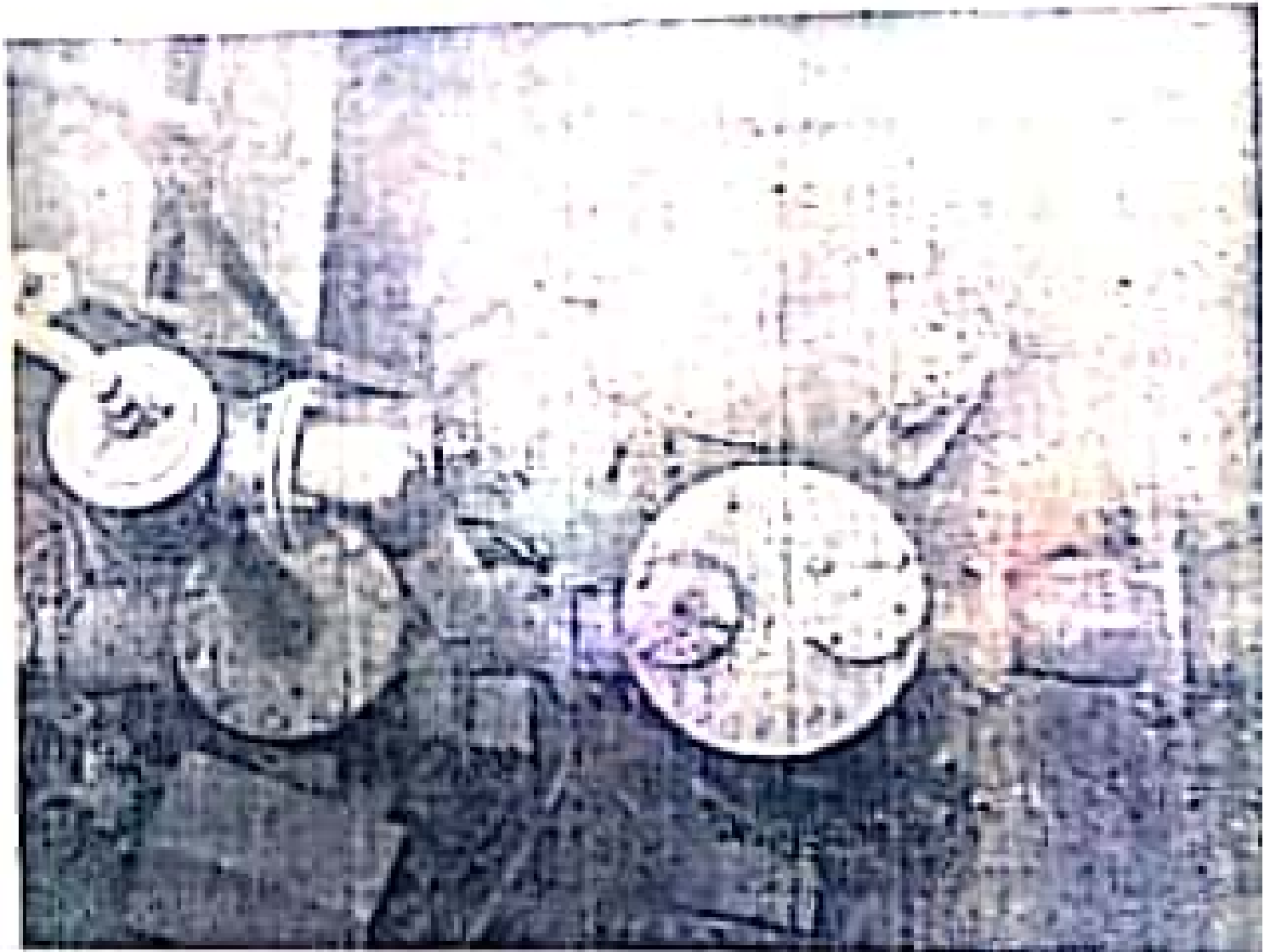
Two Nos. 10 HP Submersible type Motor (Pullen make) Pump set along with suitable starter panel & change over device has been provided. The arrangement for lifting the pumps has been made by providing MS girder, trolley & chain pulley block (indef make). The discharge from filtrate sumps goes to inlet structure through CI 150 mm dia pipeline

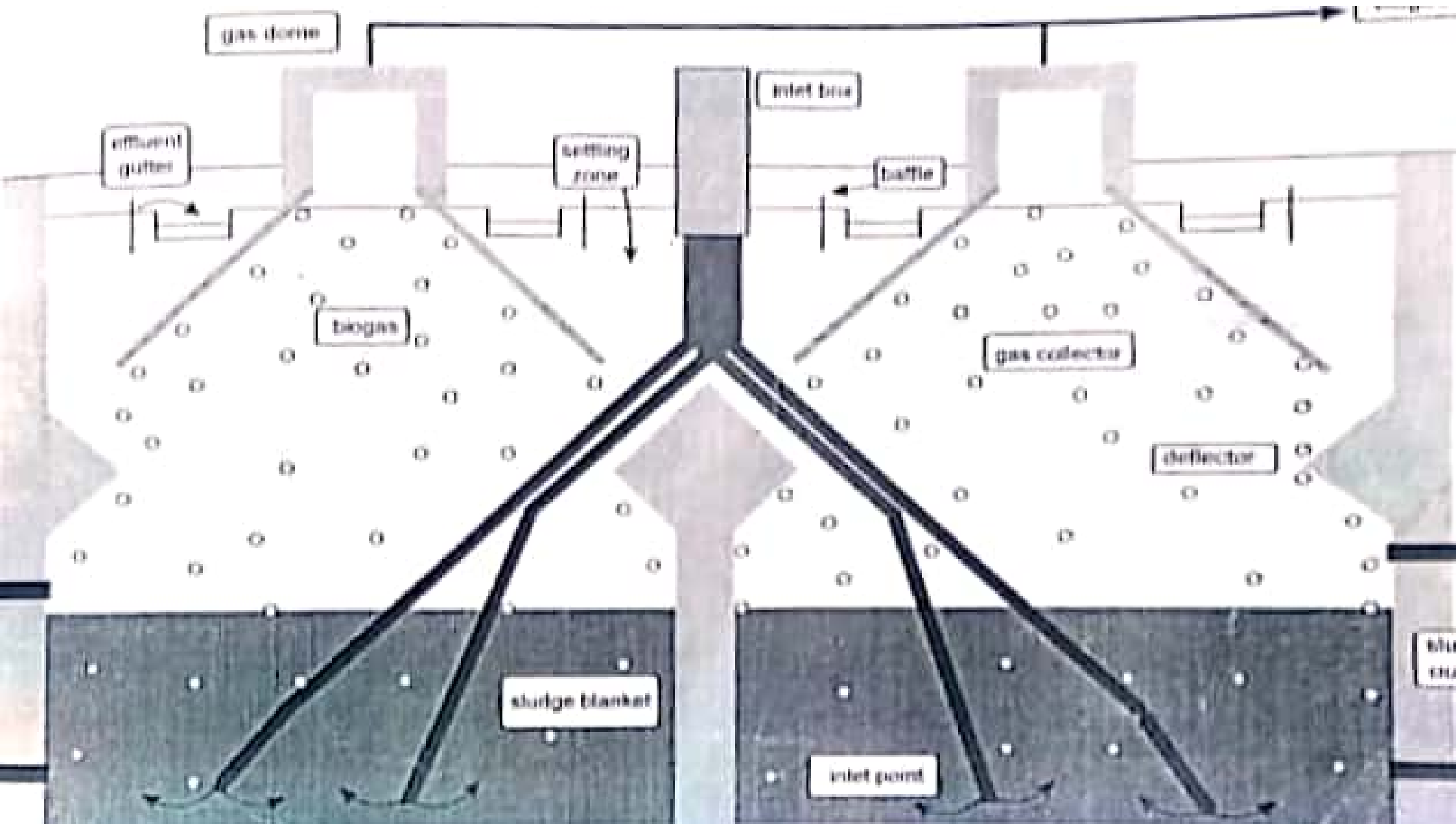


## SALIENT FEATURES

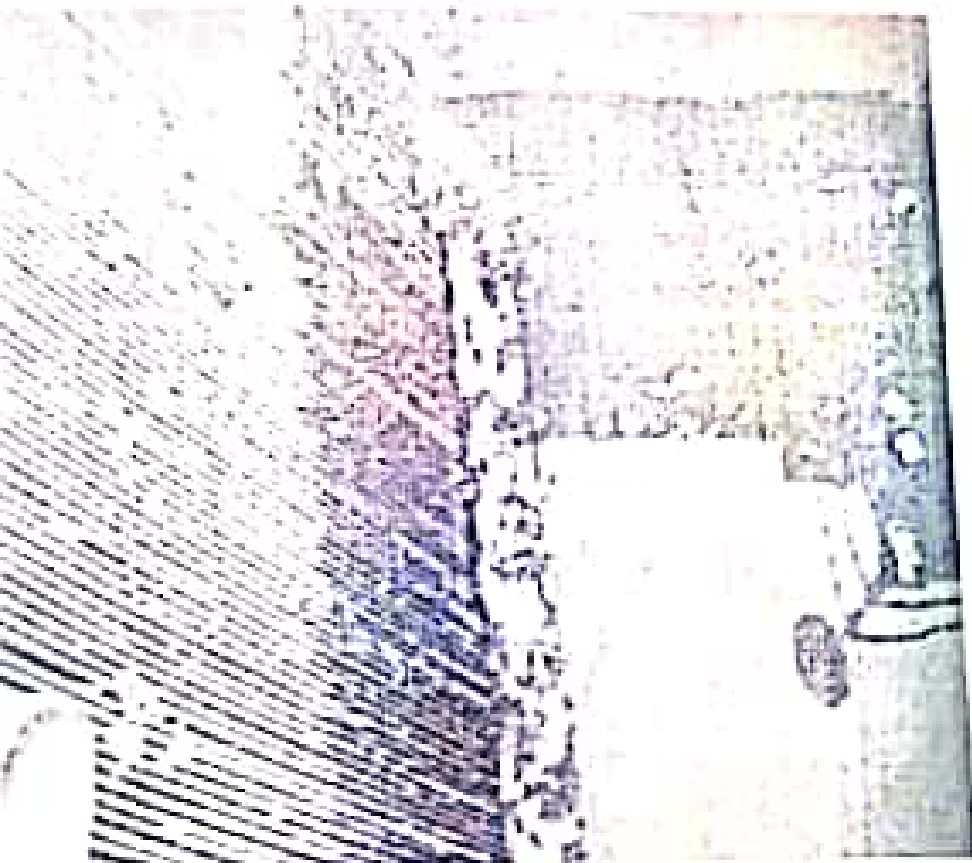
The STP located at Saharanpur (UP) was commissioned in year 1998 on UASB (Upflow Anaerobic Sludge Blanket) technology with a capacity of 38 MLD under Yamuna Action Plan (YAP). The present STP at Saharanpur is currently managed by Uttar Pradesh Jal Nigam.

- 1.1 Town** : Saharanpur
- 1.2 Topography** : Town lies between Latitude 29°55' - 30°- 00'N,  
Longitude 77°15' -77°30' E
- 1.3 Location of Plant** : Saharanpur city is situated on river Dhamola, a tributary of river Hindon ultimately merges into river Yamuna. •
- 1.4 Population Projection**
- |      |   |           |
|------|---|-----------|
| 1998 | : | 4, 02,400 |
| 2003 | : | 4, 32,100 |
| 2020 | : | 5, 33,500 |
- 1.5 Water Supply (LPCD)**
- |           |   |          |
|-----------|---|----------|
| Year 1998 | : | 150 lpcd |
|-----------|---|----------|
- 1.6 Sewage Generation (MLD)**
- |      |   |       |
|------|---|-------|
| 1998 | : | 35.75 |
| 2003 | : | 38.26 |
| 2020 | : | 56    |
- 1.7 STP Capacity** : 38 MLD
- 1.8 Year of Installation:** 1996 (approved)  
: 1998 (start working)
- 1.9 Scheme** : Yamuna Action Plan
- 1.10 Managing Agency** : Uttar Pradesh Jal Nigam
- 1.11 Area** : 11.83 hectares
- 1.12 Effluent Discharge** : Dhamola River, a tributary of river Hindon ultimately merges into river Yamuna. •
- 1.13. Treatment Units**
- |                        |   |                         |
|------------------------|---|-------------------------|
| Number of UASB reactor | : | 4 (Four) = 9.5 MLD each |
| Final Polishing Unit   | : | Oxidation Pond (2 no.)  |









**Screen Chamber:** Size 3.93 M X 5.46 M X 1.62 M SWD

Fitted with - 2 Nos. C.I. Sluice Gate (oriental make), Spindle and Operating wheel over suitable RCC platform.

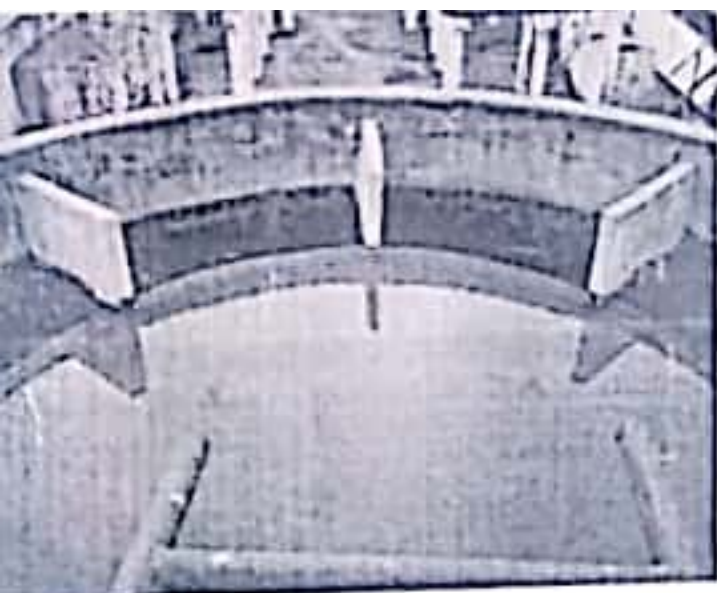
Size of Gate is 1.5 M X 1.0 M

**Manual Screen:** Size 1.8 M X 1.62 M – 1 No.

**Mechanical Screen:** Size 2.0 M X 1.60 M – 1 No.

Make: Voltas

Motor: 3.0 KW with speed = 1440 RPM



2

Division box  
Division box RCC: size 5.25 M dia. with eight compartments each fitted with 450 mm dia. C.I. puddles, pipes & sluice valves and each compartments to various distribution with RCC NP<sub>3</sub> 450 mm dia. pipe.



5

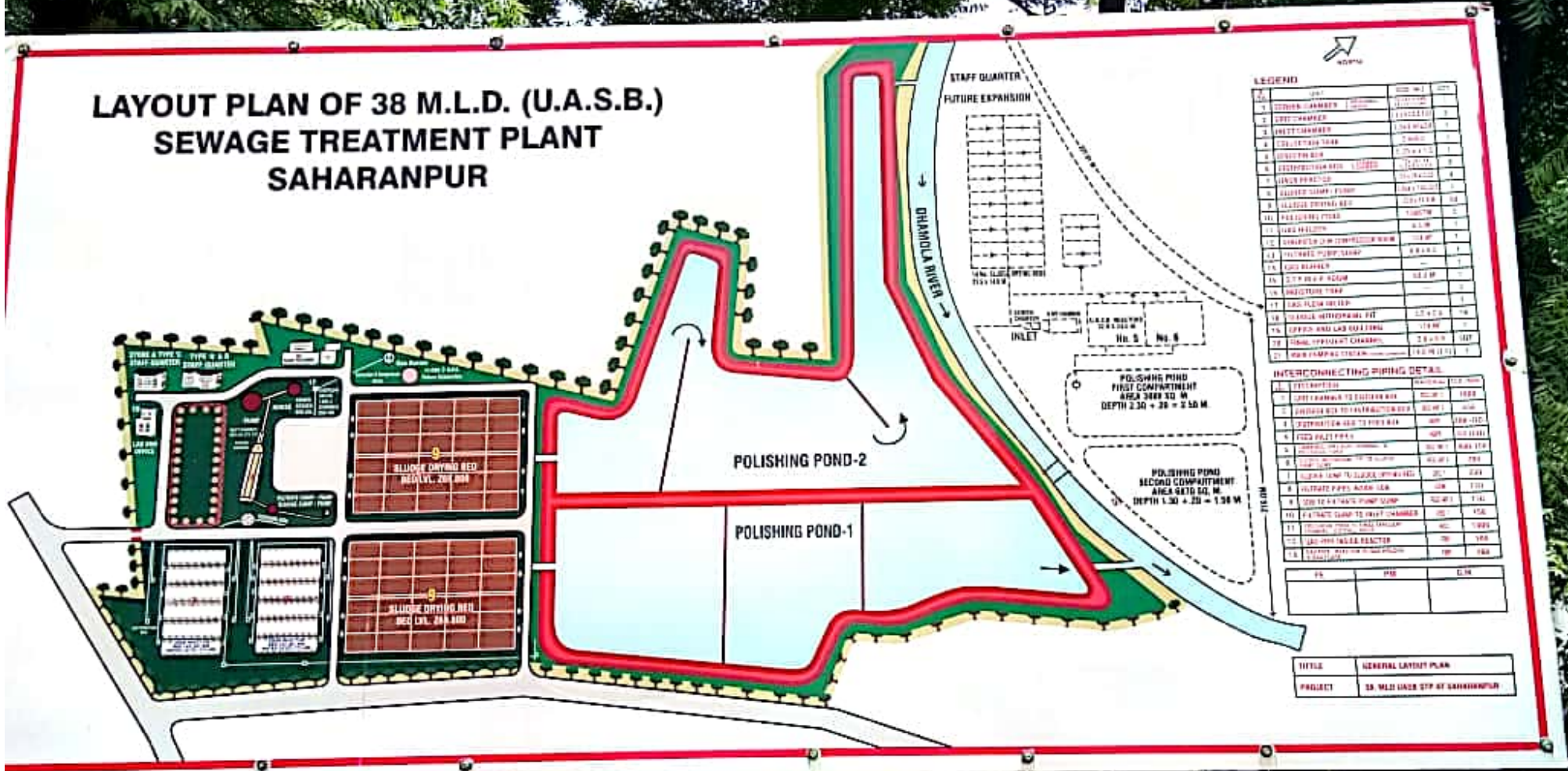
### Distribution Box

Distribution box RCC, size 2.40 M X1.90M – 8 Nos. each distribution box containing 6 compartments, each compartment is fitted with aluminum weir plate and 200 mm dia C.I. puddle pipe. From each distribution box flow is going to feeding box through 200 mm dia HDPE pipes including desired specials/ fittings /hardware's.





# LAYOUT PLAN OF 38 M.L.D. (U.A.S.B.) SEWAGE TREATMENT PLANT SAHARANPUR





# 38 MLD UASB SEWAGE TREATMENT PLANT

## SALIENT FEATURES

1. POPULATION.....	402400 DESIGNED FOR 766000	
2. CAPACITY.....	38 MLD	
3. MEATERS.....	INFLUENT	EFFLUENT
BIOLOGICAL OXYGEN DEMAND....	200	30
CHEMICAL OXYGEN DEMAND....	400	250
TOTAL SUSPENDED SOLIDS.....	400	50
4. PRETREATMENT WORK SIZE		
INLET CHANNEL....	1 No. 2.5 X 3.95 M X 3.00 M	
SCREENING....	2 No. 5.8 M X 2 M X 2.00 M	
GRIT CHANNEL....	3 No. 5.20 X 2 M	
OUTLET CHAMBER....	1 No. 6.5 M X 2 M X 2 M	
DIVISION BOX....	1 No. 5.25 M WITH.. 8-NOS. OUTLET	
5. TREATMENT WORKS		
DISTRIBUTION BOX....	8 No. 5.17 M X 100 M X 40 M	
REACTORS....	4 No. 5.28 X 24 M X 5.5 EACH	
SLUDGE SUMP....	1 No. 3.84 M DIA	
FILTRATE SUMP....	1 No. 4 M INNER DIA 6.0 M DEEP	
SLUDGE DRYING BEDS....	20 NOS- 25 X 14 M	
6. SECONDARY		
POLISHING PONDS.....	2 NOS. 12667 M <sup>2</sup> EACH.	
7. OTHER WORKS		
GAS HOLDER....	1 No. 8.5 M DIA	
DUAL FUEL GENRATOR.....	180 KVA	