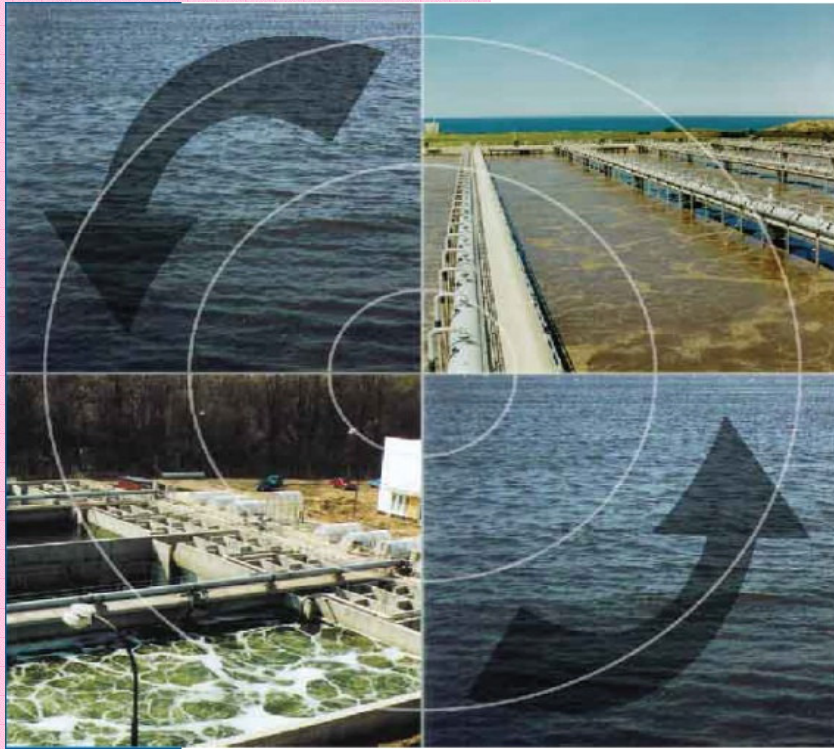


UNDERGROUND DRAINAGE SCHEME



DETAILED PROJECT REPORT FOR SATARA MUNICIPAL COUNCIL, SATARA; DIST;-SATARA

REVISED AS PER DSR 2009-2010

PREPARED BY

KIKALE ASSOCIATES

CONSULTING ENGINEERS,

230, Ramchand Malukchandnagar

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EXECUTIVE SUMMARY

- 1.0** The Satara Municipal Council has awarded the work of preparation of Detailed Project Report, Detailed Engineering and Design of the sewerage scheme for Satara Town and Detailed Estimation of the Project to M/S Kikale Associates, Baramati.
- 2.0** The survey of the Satara town is carried out and accordingly sewerage system has been designed based on the Manual on sewerage and sewerage treatment published by **CPHEEO** and also as per the guidelines of **UIDSSMT**.
- 3.0** Satara city has an 'A' class Municipal Council and town is situated at the foot of Sahyadri Hill ranges and also it is one of the important towns on Pune-Bangalore National Highway No. 4. This town has also the importance from point of view of Maratha history as its seat of Capital of Main gadi of Bhosale Dynasty since from Chhatrapati Shivaji Maharaj.

The town is situated at 5 Km West of Krishna River. The Satara railway station is at a distance of 7.0 Km. from the city on Pune-Miraj Broad gauge railway line. There are innumerable state transport buses plying through Satara to all parts of state and towards Bangalore too. The total area covered by Satara Municipal Council is 815 Ha. The population of Satara town is 1, 08,043 as per 2001 census and the population projected for the year 2040 is 191431 souls.

At present Satara town gets water from three sources (viz) KAS DAM, Mahuli (Krishna River) and Shahapur (Urmudi River). The rate of water supply is 135lpcd.

- 4.0** The details of the proposed underground drainage scheme are as follows:
The topography of Satara city is such that the general slope of the city is north East and the flow of the proposed collection system can be taken by gravity to the proposed Satara Road pumping station. The wastewater from the P.S shall be pumped through 600mm dia DI k9 pumping main 6240m long, to proposed SBR type Sewage treatment plant of 18.5mld capacity. The estimated cost of sewerage scheme is Rs. 64.22 Crores.

5.0 Project Component consists of collection system, pumping station, pumping main and sewage treatment plant. As the pipes are to be laid in Municipal or Highway Roads, no land acquisition is required.

All the proposed locations of pumping stations and STP's are decided in co-ordination with Municipal Council officials and it is understood that there would be no problem in undertaking of land.

Implementing agency should carry out the works in co-ordination with other related organizations (viz) Traffic Police, Public Works Department and other Local Body Authorities and in accordance with code of conduct.

6.0 The details of the proposed underground sewerage scheme are as follows:

1) Population

Year	Population	Wastewater flow (mld)
2010	134057	7.42
2025	167000	10.35
2040	207883	14.46

2) Collection System

Total length = 116 Km

Diameter = 150mm to 900 mm

Pipe material = RCC NP2, NP3 and NP4 pipes

3) Rising Main for P.S.1

Sr. No.	Description	P.S.1
a)	Diameter	500 mm
b)	Length	70 m
c)	Material	D.I k9 pipe

4) Pumping Machinery

Description	P.S.1
a) Pumps	Submersible pumps
b) (1DWF)	
Discharge (lps)	128
Head	13
Nos	2W+1S
H.P	40
c) (½DWF)	Submersible pumps
Discharge (lps)	64
Head	13
Nos	1W+1S
H.P	20

5) Sewage Treatment Plant

Description	STP 1
Capacity	18.50 mld
Type	SBR Technology

Current Status

Resubmitted in Nagarothan to Municipal Council.

SATARA UNDERGROUND DRAINAGE SCHEME

SUMMARY OF COST

Sr. No.	Name of Subwork	Amount
1	Working Survey	0.00
2	Sewage Collection System	485797820.00
3	Sewage Pumping Station	
a	Civil Works	2497564.00
b	Mechanical Work &Electrical Works	11854413.00
4	Rising Main	582490.00
5	Sewage Treatment Plant	140441655.00
6	Miscellaneous Works	1035898.00
	Total	642209840.00
	Add Escalation Charge	0.00
	Cost of the Scheme	642209840.00