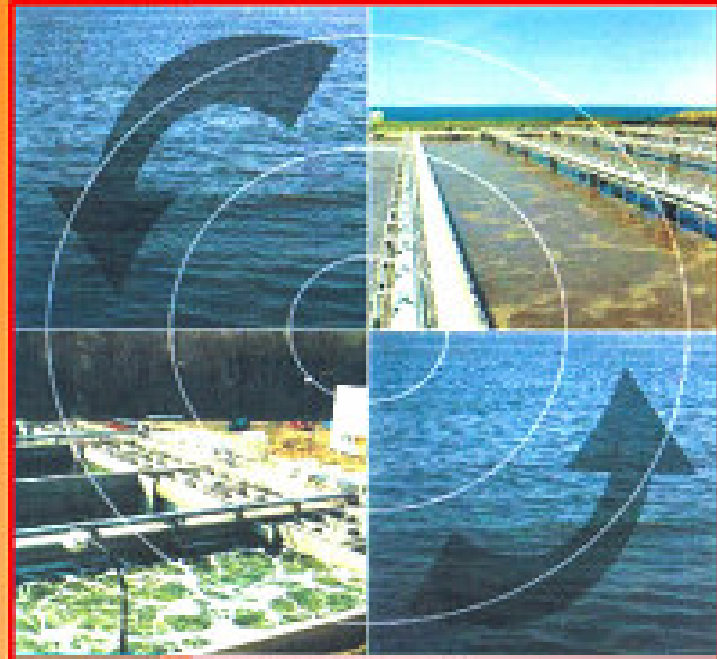


U I D S S M T

UNDER-GROUND DRAINAGE SCHEME



DETAILED PROJECT REPORT
FOR

SHIRUR MUNICIPAL COUNCIL, SHIRUR, DIST-PUNE

APRIL 2007

PREPARED BY

KIKALE ASSOCIATES

Consulting Civil Engineers

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EXECUTIVE SUMMARY

- 1.0** The Shirur Municipal Council has awarded the work of preparation of Detailed Project Report, Detailed Engineering and Design of the sewerage scheme for Shirur Town and Detailed Estimation of the Project to M/S. Kikale Associates, Consulting Engineers, Baramati, Pune.
- 2.0** The survey of the Shirur town is carried out and accordingly sewerage system has been designed based on the Manual on sewerage and sewage treatment published by CPHEEO and also as per the guidelines of UIDSSMT.
- 3.0** Shirur is an important town in Pune district of Maharashtra State. It is situated at 42 miles to the East of the Pune Metropolis. The area covered by Shirur Municipal Council is 624 Ha. The population of Shirur town is 26999 as per 2001 census and the population Projected for the year 2040 is 94428 souls. At present Shirur town gets water from the Ghod River. The water is supplied at a rate of water supply is 140 lpcd.
- 4.0** The details of the proposed underground drainage scheme are as follows: The topography of Shirur town is such that at the general slope of the city is towards North where Ghod River flows. The total area is divided into four zones and the total flow is ultimately collected at pumping station no PS2 which pumps the flow to the proposed STP of 6 mld capacity with Cyclic activated sludge process. The gross cost of the proposed sewerage system is **Rs.985.528 Lakhs.**
- 5.0** Environmental Impact Assessment: 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 STPs 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	35627	4.23
2025	57561	6.84
2040	94428	11.22

2) Collection System

Total length = 26 Km

Diameter = 150mm to 800 mm

Pipe material = RCC NP2, NP3 and NP4 pipes

3) Rising Main For P.S.

Sr.No.	Description	P.S.1	P.S.2	P.S.3
a)	Diameter	250 mm	450 mm	300 mm
b)	Length	375 m	50 m	180 m
c)	Material	D.I k9 pipe	D.I k9 pipe	D.I k9 pipe

4) Pumping Machinery

Description	P.S.1	P.S.2	P.S.3
a) Pumps	Submersible	Submersible	Submersible
b) (1DWF)	pumps	pumps	Pumps
Discharge			
(lps)	25	85	53
Head	16	11	15
Nos	2W+1S	2W+1S	2W+1S
H.P	10	20	20
c) (½DWF)	Submersible	Submersible	Submersible
Discharge	pumps	pumps	Pumps
(lps)	12	42	27
Head	15	11	14
Nos	1W+1S	1W+1S	1W+1S
H.P	5	10	10

5) Sewage Treatment Plant

Description	STP 1
Capacity	6 mld (Phase – 1)
Type	Cyclic Activated Sludge Process

Current Status

Collection system & civil work of STP completed. Machinery erection is in progress.

SHIRUR UNDERGROUND SEWERAGE SCHEME

SUMMARY OF COST

Sr. No.	Name of Subwork	Amount in Rs.
1	Working Survey	0.00
2	Sewage Collection System For Shirur town	32557700.00
3	Sewage Pumping Station No.-1	
3A	Civil Works	621196.00
3B	Mechanical & Electrical Works	2737687.00
3C	Rising Main For PS-1	819305.00
4	Sewage Pumping Station No.-2	
4A	Civil Works	1593527.00
4B	Mechanical & Electrical Works	5242500.00
4C	Rising Main For PS-2	378856.00
5	Sewage Pumping Station No.-3	
5A	Civil Works	1061273.00
5B	Mechanical & Electrical Works	4680638.00
5C	Rising Main For PS-3	511822.00
6	Sewage Treatment Plant(STP-7mld)	38785307.00
7	Miscellaneous Works	0.00
	Total	88989811.00
	Add Escalation Charges	9563000.00
	Cost of the Scheme	98552811.00