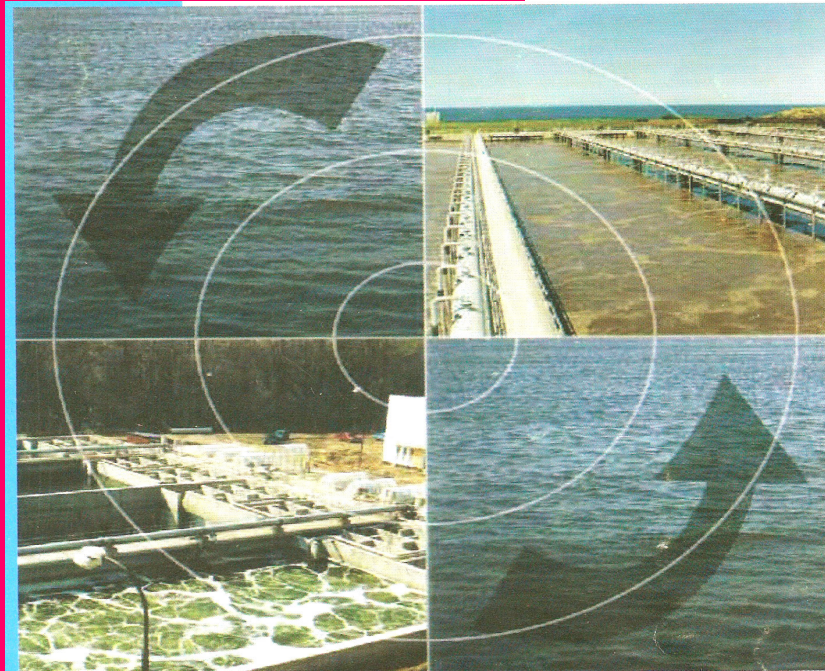


U I D S S M T

UNDERGROUND DRAINAGE SCHEME



DETAIL PROJECT REPORT FOR WADGAON MUNICIPAL COUNCIL, WADGAON DIST.-KOLHAPUR

FEB- 2008

PREPARED BY

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EXECUTIVE SUMMARY

- 1.0** The Peth Wadgaon Municipal Council has awarded the work of preparation of Detailed Project Report, Detailed Engineering and Design of the sewerage scheme for Peth Wadgaon Town and Detailed Estimation of the Project to M/S. Kikale Associates, Consulting Engineers, Baramati, Pune.
- 2.0** The survey of the Peth Wadgaon 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** Peth Wadgaon is a important town in Kolhapur district of Maharashtra State. It is situated at 19 Km from Kolhapur. There area covered by Peth Wadgaon Municipal Council is 740 Ha. The population of Peth Wadgaon town is 22754 as per 2001 census and the population Projected for the year 2040 is 49300 souls. At present Peth Wadgaon town gets water from the Warna river. The water is supplied at a rate of water supply is 110 lpcd and the water supply is being augmented to 125 lpcd.
- 4.0** The details of the proposed underground drainage scheme are as follows:
The topography of Peth Wadgaon town is such that the general slope of the town is towards North. The total area is divided in to three drainage zones and the total flow is ultimately collected at pumping station no PS1 which pumps the flow to the proposed STP of 4 mld capacity with Cyclic activated sludge process. The gross cost of the proposed sewerage system is **Rs. 858.13 Lakhs**.
- 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 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	27263	3.0
2025	36718	4.04
2040	49300	5.42

2) Collection System

Total length = 31 Km

Diameter = 200mm to 600 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	350 mm	250mm	100 mm
b)	Length	50 m	480 m	50 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 pumps	Submersible pumps	Submersible Pumps
b) (1DWF)			
Discharge (lps)	55	23	1.2
Head	11	14	6
Nos	2W+1S	2W+1S	1W+1S
H.P	15	7.5	1.0

c) (½DWF)	Submersible	Submersible	-
Discharge	pumps	pumps	-
(lps)	28	12	-
Head	11	13	-
Nos	1W+1S	1W+1S	-
H.P	7.5	5	

5) Sewage Treatment Plant

Description	STP 1
Capacity	4 mld (Phase – 1)
Type	SBR Technology

Current Status

The project is submitted to the Municipal Council.

WADGAON UNDERGROUND SEWERAGE SCHEME

SUMMARY OF COST

Sr. No.	Name of Subwork	Amount in Rs.
1	Working Survey	300000.00
2	Sewage Collection System	44523620.00
3	Sewage Pumping Station No.-1	
3A	Civil Works	981793.00
3B	Mechanical & Electrical Works	4108032.00
3C	Rising Main For PS-1	265466.00
4	Sewage Pumping Station No.-2	
4A	Civil Works	695569.00
4B	Mechanical & Electrical Works	2924680.00
4C	Rising Main For PS-2	1019965.00
5	Sewage Pumping Station No.-3	
5A	Civil Works	388930.00
5B	Mechanical & Electrical Works	433987.00
5C	Rising Main For PS-3	89097.00
6	Sewage Treatment Plant(STP-4mld)	21893486.00
7	Miscellaneous Works	1227741.00
	Total	78852366.00
	Add Escalation Charges	6960450.00
	Cost of the Scheme	85812816.00