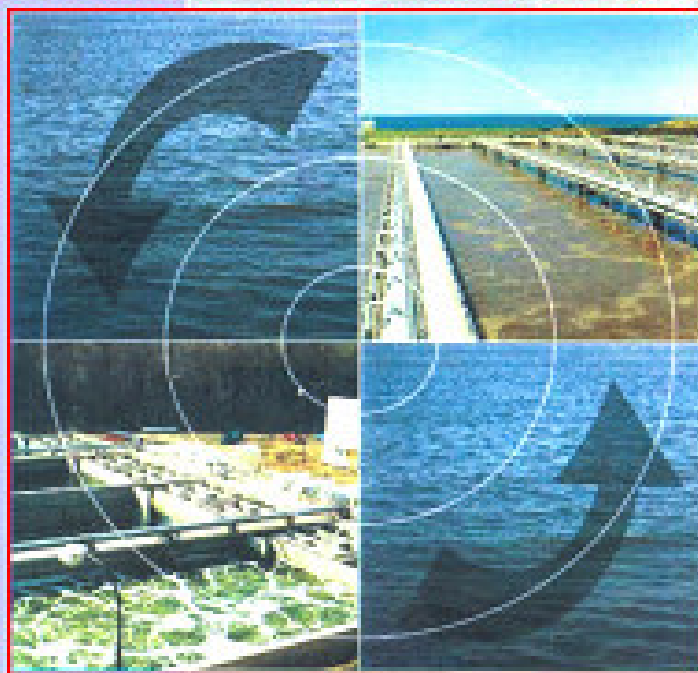


# U I D S S M T

## UNDER-GROUND DRAINAGE SCHEME



DETAILED PROJECT REPORT  
FOR  
**DAUND MUNICIPAL COUNCIL, DAUND**  
**FEBRUARY 2007**

PREPARED BY

**KIKALE ASSOCIATES**

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## EXECUTIVE SUMMERY

**1.0** The Daund Municipal Council has awarded the work of preparation of Detailed Project Report, Detailed Engineering and Design of the sewerage scheme for Daund Town and Detailed Estimation of the Project to M/S. Kikale. Associates, Baramati, Pune.

**2.0** The survey of the Daund town is carried out and accordingly sewerage system has been designed based on the Manual on sewerage and sewage treatment published by CPHEEO and as per the guidelines of UIDSSMT.

**3.0** Daund is an important taluka in Pune district of Maharashtra State. It is situated at 76 kms to the East of the Pune Metropolis. Daund is a railway station on Pune-Hyderabad B.G.Railway junction

There area covered by Daund Municipal Council is 603.21Ha. The population of Daund town is 42204 as per 2001 census and the population Projected for the year 2040 is 128421 souls. At present Daund town gets water from the Mutha right bank canal .The water is supplied at a rate of 125lpcd.

**4.0** The details of the proposed underground drainage scheme are as follows:  
The topography of Daund town is such that at the general slope of the city is towards North where Bhima River flows. A decentralized wastewater collection system is proposed for Daund town. The total wastewater flow shall be collected at three pumping station and ultimately brought to sewage treatment plant STP-1 of 10.5 mld capacity with Cyclic activated sludge process. The gross cost of the proposed sewerage system is **Rs. 1925.70 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	66032	7.42
2025	92076	10.35
2040	128421	14.46

### 2) Collection System

Total length = 63 Km

Diameter = 150mm to 800 mm

Pipe material = RCC NP2, NP3 and NP4 pipes

### 3) Rising Main for P.S.1

Sr. No.	Description	P.S.1	P.S.2	P.S.3
a)	Diameter	450 mm	250 mm	150 mm
b)	Length	50 m	600 m	1100 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	128	21	12
(lps)			27
Head	13	14	2W+1S
Nos	2W+1S	2W+1S	7.5
H.P	40	7.5	
c) (½DWF)	Submersible pumps	Submersible pumps	Submersible Pumps
Discharge	64	11	6
(lps)	13	13	17
Head	1W+1S	1W+1S	1W+1S
Nos	20	3	2
H.P			

## 5) Sewage Treatment Plant

Description	STP 1
Capacity	10.5 mld (Phase – 1)
Type	Cyclic Activated Sludge Process

### Current Status

80% Collection system & civil work of STP almost completed. Machinery erection is in progress.

## DAUND UNDERGROUND SEWERAGE SCHEME

### SUMMARY OF COST

Sr. No.	Name of Subwork	Amount in Rs.
1	<b>Sewage Collection System</b>	
1A	Sewage Collection System For Zone -1	48429801.00
1B	Sewage Collection System For Zone -2	19101179.59
1C	Sewage Collection System For Zone -3	33958851.00
1D	Sewage Collection System For Zone -4	4735080.00
2	<b>Sewage Pumping Station No.-1 for Zone 1 &amp; 3</b>	
2A	Civil Works	1610893.00
2B	Mechanical & Electrical Works	9377705.00
2C	Rising Main For PS-1	398104.00
3	<b>Sewage Pumping Station No.-2 for Zone 2</b>	
3A	Civil Works	771866.00
3B	Mechanical & Electrical Works	3197029.00
3C	Rising Main For PS-2	1126760.00
4	<b>Sewage Pumping Station No.-3 for Zone 4</b>	
4A	Civil Works	510268.00
4B	Mechanical & Electrical Works	2827535.35
4C	Rising Main For PS-3	1511522.00
5	<b>Sewage Treatment Plant( STP-10.50 mld)</b>	65014043.00
	<b>Total</b>	<b>192570636.94</b>
	<b>Say</b>	<b>192570637.00</b>