

# Beautification of Taladanda Canal using CCGM Lining Technology in Cuttack Millennium City

from RD00 to 1.5Km





## View of Taladanda Canal before execution



**Growth of vegetation, shrubs along the slope & bed. The waterway filled with garbage presenting a very unpleasant, unhygienic and shabby look.**

# Overview of the Project

## Challenges faced

Sl No	Problem Faced	Solution
1	There were number of trees on the canal bank & slopes which were removed through Forest Development Corporation.	The tree trunks & roots were removed by OCCL engaging excavators which were difficult and time consuming.
2	In canal slope, lot of telephone cable laid by telecom service providers and other private agencies which were disconnected and shifting of electric pole/line was a major issue .	This was tackled by paying cost to electricity authority by DoWR and giving short notice to telecom service providers and other private agencies for disconnecting and shifting.
3	Various drainage outlets of Hospital & Municipality out-fall to Taladanda Canal.	The outlets were subsequently closed by Cuttack Municipality and took alternate arrangement to divert the live drainage waste water.
4	The slope and bed of canal are filled with garbage which are mainly medical waste and waste produced by the slum dwellers and it was looking very scabby.	In order to make it proper profile the overburden garbage and unusable earth were removed which made a challenge for disposal. The authority has to identify the disposal area at the outskirts of Municipal area.
5	During preparation of canal profile prior to CGCM lining, lot of site issue were faced i.e. 1) seepage in canal slope 2) sliding of earth due to higher water table in river Mahanadi.	The same were tackled with construction of additional cement concrete toe walls / retaining walls and use of filter materials etc during execution depending upon requirements. The decision of construction of toe wall / retaining wall could only be taken during the construction.

## Overview of the Project

### Outcomes

- 1. Enhancement of overall aesthetics & beautification of Cuttack Municipal area and promoting eco-tourism.**
- 2. Socio-economic development to the citizen of Cuttack urban local bodies and people coming from neighbourhood places.**

## Shaping the Slope profile



**Sand Filling followed by Moorum backing**



# Laying and Pouring of concrete into the CCGM



**Cementious Composite Lining Synthetic mattress (CCGM) over Synthetic mattress**

## View of CCGM complete



**The CCGM lining is ready for supply of water in canal**

# View of Taladanda Canal after CCGM Lining





## View of Taladanda Canal after CCGM Lining





BEATUFICATION OF TALADANDA CANAL USING CGCM LINNING FROM RD 0.00 TO 1.5KM

PRE-EXECUTION PHOTOGRAPHS



**Before execution Canal is looking more than a drain than a Canal. Presence lot of trees, shrubs, garbage on the canal slopes and bed making the canal scabby.**



**Removing Debris, garbage, uprooting trees by means of excavators.**



**DURING EXECUTION OF WORKS**



**Profiling the Canal Section**



**Compaction using moorum admixture**



**Laying of Geo-textile synthetic mattress**



**Pouring of Concrete inside the Mattress.**



## POST CONSTRUCTION SCENARIO



**Only Slope lining was done using CCGM technology and Canal bed was filled with sand.**

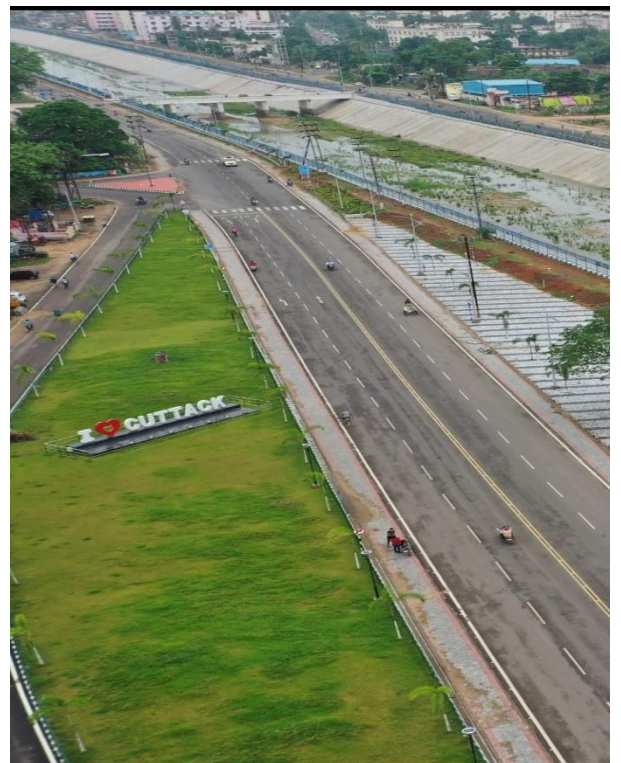
**(No water flow View)**



**View of Canal after Water Supply in Canals**



## NEW RECREATION CENTRE ON THE CANAL BANK





ARIEL VIEW

