

Annexure A: Note on Impactful Projects in Vadodara City

Public Wi-Fi and Intelligent Poles Project

On 14 August 2017, Hon. Chief Minister of Gujarat Shri Vijaybhai Rupani, dedicated first phase of this project, comprising of 12 intelligent poles with **Public Wi-Fi facility and Smart Billboards** in Vadodara, as part of First phase of the project. This phase of the project was commissioned in record time of **45 days** from the date of vendor finalization.

The Public Wi-Fi and iPoles project aims at providing Wi-Fi Internet services across the city on **entirely PPP model, for the first time in India under Smart City and help to achieve Digital India**. The project has two major components:

- Public Wi-Fi Services for citizen
- Intelligent Poles with provisions for installing smart elements

The project is being implemented in PPP mode, with Revenue commitment of **INR 22.41 Cr.** to VSCDL/VMC, over concession period of 15 years (out of that Wi-Fi service would run for 7 years). M/s Indus will invest approximately **INR 200 Cr.** in this project. This project will not have any financial burden on VSCDL/VMC.

As part of this project, **450** intelligent poles (having 12 meter of height and 30 meter of height) would be installed at strategic locations across Vadodara. In first years around 200 iPoles will be made operational. Rest of poles would be installed in subsequent years.

Each pole will have Wireless Access Point (Wi-Fi Hot-Spot) and Smart billboard. The poles will also have provision to install other Smart Elements such as CCTV Camera, Environmental Sensor, Public Address System, Emergency Call Box etc. These smart elements are being installed by the CCC Vendor (work order awarded for these smart elements and vendor will procure/install soon).

This project is being implemented by **M/s Indus Towers Limited**, the biggest telecom tower company in India, is primarily focused on providing Telecom Infrastructure services to major Telecom operator. Indus Tower (which is a JV between Vodafone, Airtel and Idea) has installed and maintains over 1 Lakh Mobile Towers across India.

Benefits to Citizen

- Citizen will be able to get free public Wi-Fi facility on their mobile devices (Phone or Laptop) for 50 MB / 30 minutes daily (Whichever is first).
- Over and above this, they can also use another 50 MB for accessing all government websites including VMC websites.
- Beyond free usage, citizen can purchase additional Wi-Fi Data pack at nominal rates

Benefits to VSCDL / VMC

- There is not financial burden on VMC or VSCDL for this project as entire investment is being done by the concessioner.
- VSCDL will get revenue of INR 22.41 Cr. over next 15 years.

- Each iPole will have provision to install other smart elements that would save the cost for other projects (Police CCTV, Integrated CCC etc.) and avoid duplicate expenses.
- The Smart Billboards will display civic and public services related messages/information, such as heavy rain alerts, Swachhta related messages, Swine Flu alerts
- The poles will have fancy aesthetically designed , visually attractive designs including Gazebo, fancy LED lights (Please refer design illustrations attached)
- This project will create Digital Backbone for city, in terms of additional OFC pairs being made available to VSCDL, for free.
- This project will also help to achieve Digital India mission for the government.

Benefit to the Concessioner (M/s Indus Towers Ltd.)

The following revenue generation avenues are part of the project, for the concessioner:

- To kick-start the project, VMC is providing two OFC pairs to them, out of CCTV project, to carry internet bandwidth required for citizen.
- The iPoles have provision to install 2G/3G/4G (and upcoming technology) mobile Antenna, which can be given on rent.
- The Smart billboard can show advertisement of third party.
- Beyond 50 MB/30 minutes of free usage, premium Wi-Fi data packs can earn additional revenue.
- Additional Fibre duct being installed by the concessioner along the route can generate additional revenue.

Current Status

12 Intelligent Poles with Wi-Fi Access Point and Smart bill boards are operational in ABD area of the city. Till now M/s Indus have invested around 6 Cr. of capital expenditure.

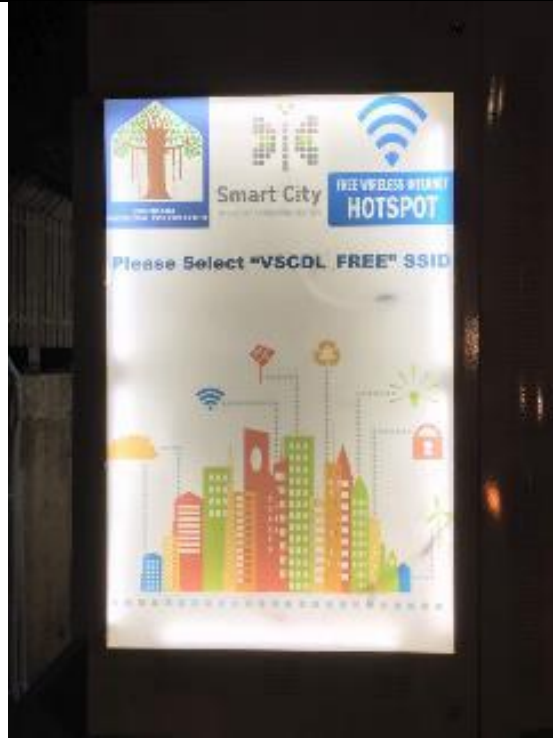
Site Photographs



iPoles with Wi-Fi Access Point, Smart Billboards and LED Lights in Vadodara



Below photographs are from Proof-of-Concept (PoC) pole that was setup.



Other Pole Designs that would be implemented as part of project

Note: Appropriate design out of these illustrations would be implanted depending upon the site requirement, as well as aesthetic appeal and public convenience. For example, (a) Kalaghoda Design would be installed near Kalaghoda circle (b) Smart Gazebo can be installed near Bus-Stop etc.



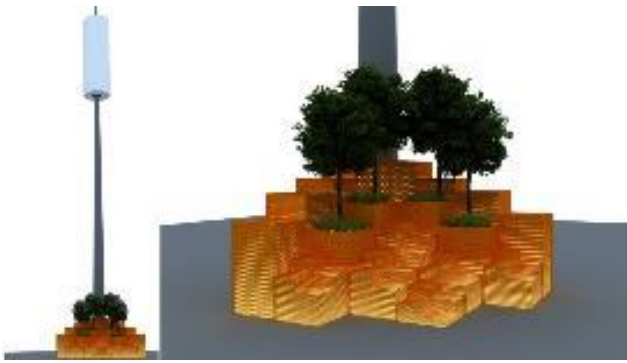
Kalaghoda



Mozaic Design



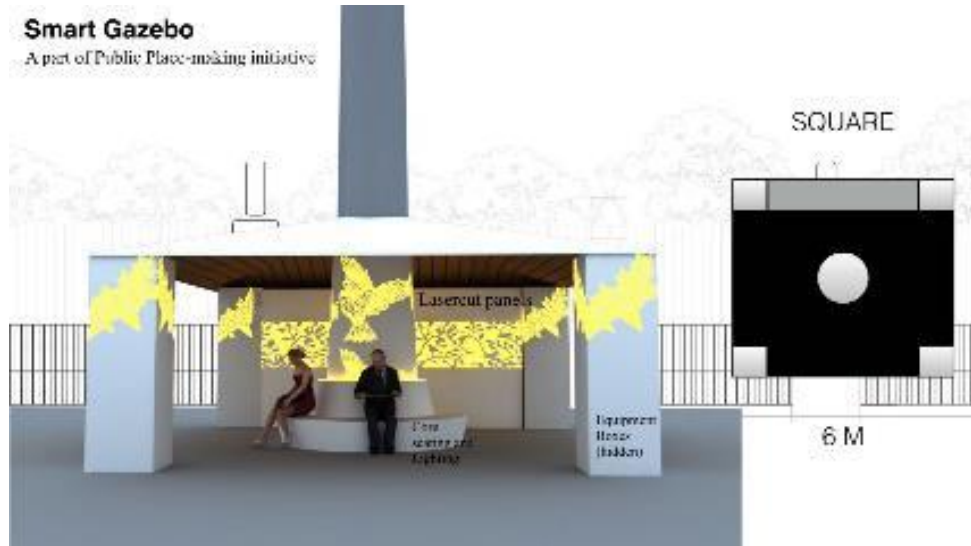
Illuminated Cylinders



Illuminated Steps



Vertical Garden (Green Plants)



Note: All pole designs are © Copyright VSCDL and Indus Towers