**THE SITE:** The site, Lalbaug – Parel, is located in the central part of Mumbai. The site is not adjacent to the Sea. The Arabian Sea is about 2 – 2.5 Km away from West & East side of the site.

**BACKGROUND:** Earlier this area had most of the Textile Mills & Chawls (Group Housing) for the mill workers. Nowadays, after shutting down the Textile business, most of the Mill Areas providing huge open space in the heart of the Mumbai for the Future Generation of the Mumbai, directly affecting the Real Estate Sector of the City.

**CONNECTIVITY:** The site is well connected by the eastern express highway as well as the western express highway. The site can be easily accessed from Chinchpokli station and curry road station in central line. Even the site can be easily accessed by monorail in near future.

**CLIMATIC CONDITIONS:** The proximal distance to the sea lends a humid effect to the weather in Mumbai throughout the year. The months between March and October are characterized by high humidity. The average temperature in Mumbai is 27.3 °C (81 °F). Mumbai’s climate receives an average of 2099 mm (82.6 in) of rainfall per year, or 175 mm (6.9 in) per month.

**LOCATION:** The actual location of the site is on a 10 meter wide pavement in Dr. Ambedkar road. The modular unit is placed in a ideal place and has a clear view of the junction. The unit is placed under the clear sky so that it can get direct solar radiation. Should be near the junction but at the same time away from the busy traffic.

**SITE JUSTIFICATION:** The site is at the junction connecting Dr. Ambedkar marg and Sane Guruji marg. Dr. Ambedkar connects Lalbaug to Chhatrapati Shivaji terminus by Eastern express highway. Sane Guruji marg connects it to N.M. Joshi marg which further connects to Western express highway. The site is at walkable distance from Chinchpokli station. The location of the site is justified as it is situated between Byculla traffic police station towards south and Bhiwadi traffic police station towards north.

The ideal location for any police chowki would be:
1. Junction where the peak hour traffic movement is heavy for most part of the year.
2. Also such junction which is closer to a Police Station.
3. As well such junction which can become the most congested junction during festival.
   If we pay closer attention towards the per hour density of the traffic flow over this junction, we can realize that it is congested for most part of the day (mostly during peak hours) throughout the year. Thus it becomes imperative for us to either decongest it or monitor it for smooth vehicular movement. Decongestion is not a possibility so the choice we have is to provide a proper Monitoring Police Chowki. This will help in smooth vehicular movement without congesting the junction.

This Junction becomes the most important link from Lalbaug towards Girgaon Chowpathy during Ganesh Festival. Such chowkis needs to be made temporary at such times. If already present, an additional chowki will not be a necessary.

The proposed modular units are designed for such very need. This Unit can be repeated wherever we have similar requirement anywhere in Mumbai. This Unit is self-contained with ample amount of Light & Natural ventilation. Its design is driven by its function. It is very compact & occupies lesser space.

**PROPOSAL FOR TRAFFIC POLICE CHOWKY AT LALBAUG**

KISHORE CHANGMAI
ROLL NO-02 SEM. 11

RACHANA SANSAD’S INSTITUTE OF ENVIRONMENTAL ARCHITECTURE
Design of Eco - Traffic Police Chowky at Lalbaug-Byculla Flyover Junction, Sem1 2010 - 2012

**DESIGN APPROACH**

**SQUARE** - One of the simplest forms of geometry. Just for straight similar lines.

Similarly a simple square can be divided into number of square boxes.

This square can be divided into number of similar squares.

Even after removing, the size and shape of small square boxes remain same.

Placing the square boxes on top of another.

**ECOFLEX MODULAR UNITS**

STEEL product made from recycled steel can be recycled again at the end of their useful life.

STEEL is unique because it always contains recycled steel.

The use of steel scrap lowers the total cost of producing new steel.

**PROPOSAL FOR TRAFFIC POLICE CHOWKY AT LALBAUG**

KISHORE CHANGMAI
ROLL NO-02 SEM. 11

RACHANA SANSAD’S INSTITUTE OF ENVIRONMENTAL ARCHITECTURE
Design of Eco - Traffic Police Chowky at Lalbaug-Byculla
Flyover Junction, Sem 1 2010 - 2012

PROPOSAL FOR TRAFFIC POLICE CHOWKY AT LALBAUG
KISHORE CHANGMAI
ROLL NO-02 SEM. 11

RACHANA SANSAD'S INSTITUTE OF ENVIRONMENTAL ARCHITECTURE
Design of Eco-Traffic Police Chowky at Lalbaug-Byculla Flyover Junction, Sem1 2010 - 2012

**ecoflex modular units**

- **WALL PANELS: AEROCON PANEL**
  - Aerocon panels are made of two fibre reinforced cement sheets enclosing a light weight core.
  - The use of flyash and ats substitution for timber based products makes the panels Eco-friendly.
  - Aerocon panels are resistant to water, fire, termites and rodents which make them withstand adverse weather conditions.
  - Good thermal and insulation properties.
  - Strong, durable, light weight and easily relocatable.
  - Suitable for fast track construction by elimination of onsite wet plastering and curing.

- **APPLICATIONS**
  - External load bearing walls.
  - Internal partition walls.
  - Flooring and roofing.
  - Louvers, shelves and stair treads.
  - Fire rated enclosures.
  - Acoustic barriers.

- **RECYCLABLE STEEL**
  - Steel is a unique material because it always contains recycle steels.
  - Recycling steel saves energy and natural resources.
  - When one ton of steel is recycled, 2500 pounds of iron ore, 1400 pounds of coal and 120 pounds of limestone are conserved.

- **ECO PAINTS**
  - Eco paints are non-toxic with zero VOC (volatile organic content) and have no odour.
  - Most of them are derived from plant resources and minerals, including citrus peel extracts, essential oil, seed oils, tree resins, lead free dryers and natural pigments.
  - Benefits: coating flexibility, better glass retention, better face retention, reduce health risks, less pollution and improved durability.

- **WATERLESS URINALS**
  - Waterless urinals do away with the requirement of water for flushing and result in saving of water.

- **E-BOARD**
  - Reinforced multipurpose boards.
  - E-Board is a plain fiber cement board made up of cement cellulose and select mineral fillers. It is a wood free, eco-friendly product manufactured through high pressure steam curing autoclave products.
  - Resistant to environmental corrosion, easy workability, user-friendly.
  - Consumes less paint or polish, good insulation.

**PROPOSAL FOR TRAFFIC POLICE CHOWKY AT LALBAUG**

KISHORE CHANGMAI
ROLL NO-02 SEM. 11

RACHANA SANSAD’S INSTITUTE OF ENVIRONMENTAL ARCHITECTURE