



SHARMIN SHAIKH

ARCHITECTURE PORTFOLIO

SHARMIN SHAIKH

ARCHITECT

+66959718468 - +66970314110
sharminrsk096@gmail.com
420 Banfuengfah 2+ Phuket
8300

ABOUT ME

Industrious and perceptive individual with a will to explore my field as a responsible member of my fraternity. I admire working in challenging situations and am keen to explore varied projects.



PERSONAL INFO -

- Date of birth: 07/12/1996
- Nationality: Indian
- Passport no: M6853820
- Marital status: Single
- Languages: English, hindi

EDUCATION-

- **Bachelors in Architecture** from Mumbai University
GPA: 7.20
- THESIS WORK - Studying Energy Efficiency designing, sustainable solutions for Urban Spaces.

SKILLS -

- Presentation
- Team work
- Communal skills

Currently experienced in:

- Concepts and designing
- Site supervision
- Detailed drawings
- MEP services
- Working drawings
- BOQ's

EXPIRIENCE -

▪ INTERNSHIP :

27/11/2017 – 05/05/2018

Intern Architect at KALPIN ECOSCAPES
Principal Architect- **RUPALI RAUT**

Projects:

- Vardhaman Grandeur: Andheri
- Vardhaman Gardens: Thane
- Vardhaman Flora: Byculla
- ADR United-Udwada9: Vapi
- Oasis Resort: Kolad
- Farm house in Malwan

ADDITIONAL WORKS -

- Advanced study in Climate responsive architecture
- Research work : Sustainable habitat workshop in Auroville
- ABCM –material research , usability and adaptability and construction techniques.

SOFTWARES -



▪ CONSULTING ARCHITECT :

07/2018 – 06/2019

Consulting Architect at LEAFYLAND With
Mr. **Kanchan Mondal**, Founder

Projects:

- GST Audit 2: Churugate
- GST Bhavan: Cuffe Parade
- Motilal Oswal: Prabhadev

▪ ARCHITECT :

05/2019 – 01/2020

Architect at GLAFHS With
Risland Realtors
-The Icon : Thane

COLLEGE WORKS

PROJECTS

- THE ICON
- VARDHMAN GRANDEUR
- VARDHAMAN GARDENS
- KOLAD RESORT

- THESIS
- MASS HOUSING
- RESIDENTIAL SCHOOL
- BUS TERMINUS
- PANELS

RESEARCH

- SERVICES
- MATERIAL USE
- TECHNOLOGY



SALES GALLERY

THE ICON

ONGOING PROJECTS

THE ICON

THANE

A perfect blend of innovation and efficiency is the project of the Icon developed by **Risland Realtors** (County Garden developers). The principles and views of the project focuses on comfortable living in the heart of the city. The Icon introduces the SSGF technology of construction in India.

The design considerations are as follows :-

- Palatial apartment designs with zero negative spaces with thoughtful interior designing for easier access.
- Convenient parking with secured society space.
- All-natural, unobstructed garden comprising of multi-dimensional layers of lawns, flowers, bushes, trees, and accessories.



1. Swimming Pool-B
2. Cricket Play Area
3. Terraced Recreation Area
4. Jogging Track
5. Badminton Court
6. Kids Play Area-A
7. Swimming Pool-A
8. The Icon Club
9. Prayer Garden
10. Multipurpose Area
11. Kids Play Area-B
12. Stilt Clubs



PROJECT LAYOUT

Plot Size : 6.88 acres
 Towers : 6 nos
 Towers Facing : E-W
 Total no. of Units : 1012
 Height of each floor : 3 m
 FSI Rate : 2.45
 Garden Ratio : 25%

THE ICON

MADISON 1

6 Units - 25 FLOORS

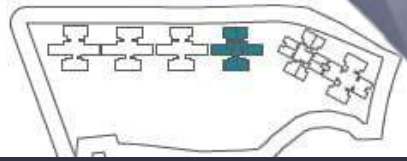
Four 3 BHK Compact
Two 3 BHK Luxury

SERVICES:-

- 4 Lifts
- 2 Passenger
- 1 Stretcher
- 1 Fire/Service



Madison 1



MODEL



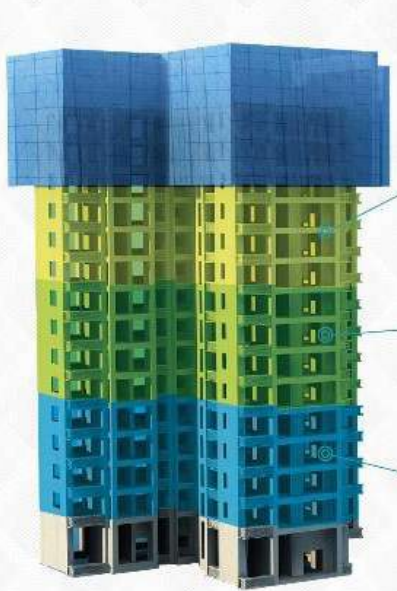
THE ICON



MADISON 2
Four 2 BHK Compact
Four 2 BHK Luxury

SERVICES
5 Lifts
3 Passenger
1 Stretcher
1 Fire/Service

SSGF TECHNOLOGY



Partition walls



Interior finishing



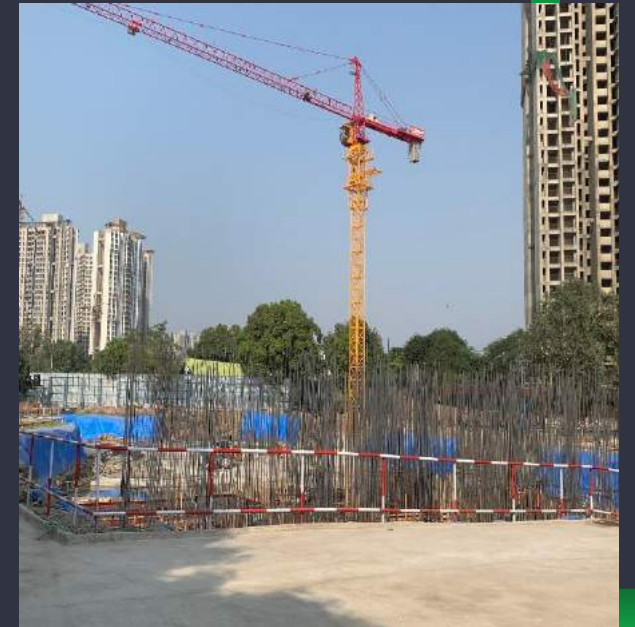
Powerful homes



Madison 2

ONGOING PROJECTS

THE ICON



VARDHAMAN GRANDEUR

M U M B A I

Client: Vardhman Developers

Contemporary architectural style and curvilinear elements on building façade have been extended in the landscape design. Emphasis is given to provide actively usable spaces within the availing area on ground level & passive recreation on terrace level.

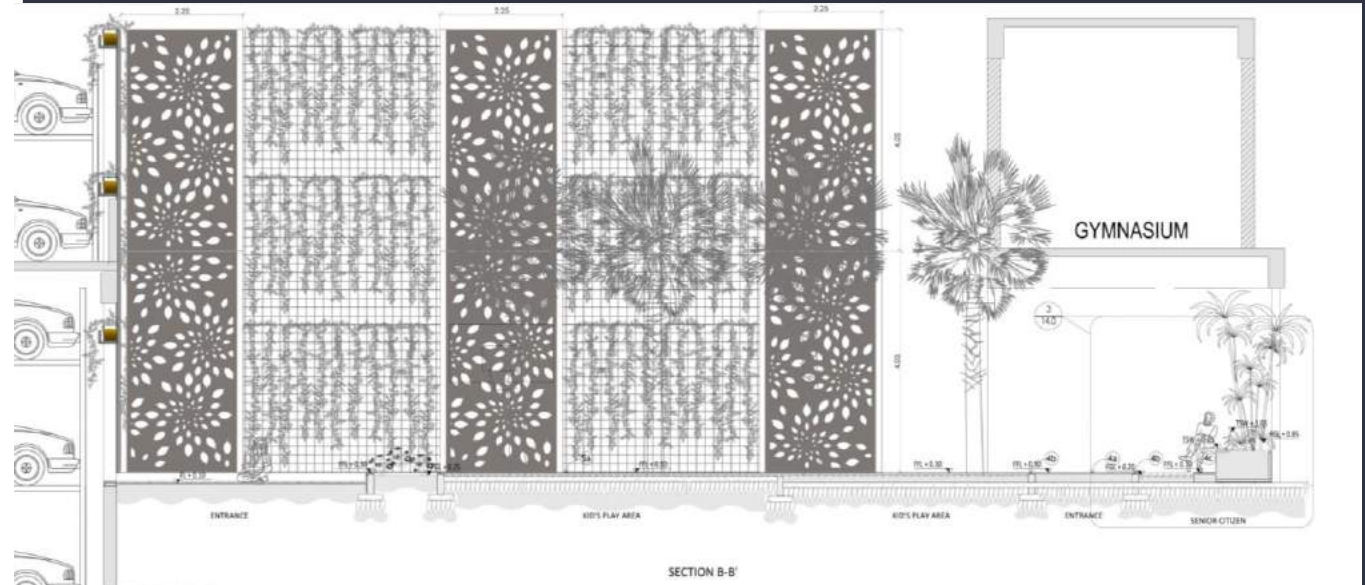
Use of distinctive curve lines along with petal shaped paving pattern gives artistic impression and binds all facilities such as Jogging Track, Kids Play area, totlot & senior citizen area amidst greenery.

Central confined garden space accommodates multipurpose play court along with feature seating & Kids Play area amidst greenery. Surrounding 8.0 M high Car Parking structure is beautifully camouflaged in landscape by using Green wall & feature screen panels. Totlot & Senior citizen area is provided in shade under stilt portion ensuring security & comfort.

ROLES AND RESPONSIBILITIES :

- Preparing BOQ, market survey, quality and quantity survey.
- Preparing working drawing, municipal drawings, detailed drawings, MEP designing with automated systems for parking.
- Designing Landscape for the project complete with the details and options.
- Outdoor furniture design such as low cost partition wall, benches, planters and driveway.

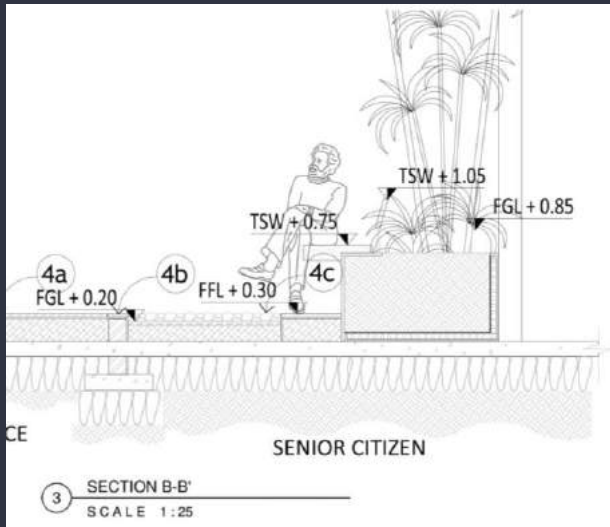
VARDHAMAN GRANDEUR



1 SECTION B-B'
SCALE 1:50



2 PANEL DETAIL
SCALE 1:25



3 SECTION B-B'
SCALE 1:25

SEATING SECTION

PARTITION WALL DESIGN

- Partition wall is designed to be cost efficient while using natural materials which are widely sustainable or low maintenance.
- The materials for totlot is EPDM flooring and the various outdoor furnitures are designed in CORTEN steel.

3.6 acres of overall master plan with scattered R.G's; which have been allocated with different usage depending on the size, location and character of the respective space. A thought has been put forth of using the existing site features while redefining the spaces to acquire a plush look.

VARDHMAN GARDENS

THANE



VARDHMAN GARDENS



MULTIPURPOSE COURT:
contains Olympic size badminton court with timber decking for spectators. Small outdoor gym is designed amidst the lawn area for open and fresh experience.

MULTIPURPOSE COURT AT 4.25M

RECREATIONAL GARDEN:

- Contains football ground with platform for spectators.
- Stepping stone walkways for leisure walks
- Tree grooves with mounds of various heights to replicate a more natural setting and provide peaceful and private strolls.
- An big open playground for multiple use.



RECREATIONAL GARDEN WITH WALKWAY

CLUBHOUSE:

- The amphitheater lies in NE to the clubhouse with seating and the main entrance.
- It is adjoined by the senior citizen track which includes the pebbled path and timber platforms.



CLUBHOUSE WITH AMPHITHEATER

15 acres of land with a capability to provide accommodations for all the income groups, while maintaining the integrity of the society, is the Mass housing project.

DESIGN CONSIDERATIONS :

- Design based on climatology.
- **35% more green-scape.**
- Affordable housing for all income groups.
- Personalized gathering spaces for all income groups.
- Multiple chowks for easy and simplified circulations.

DESCRIPTION :

Location – Vi rar

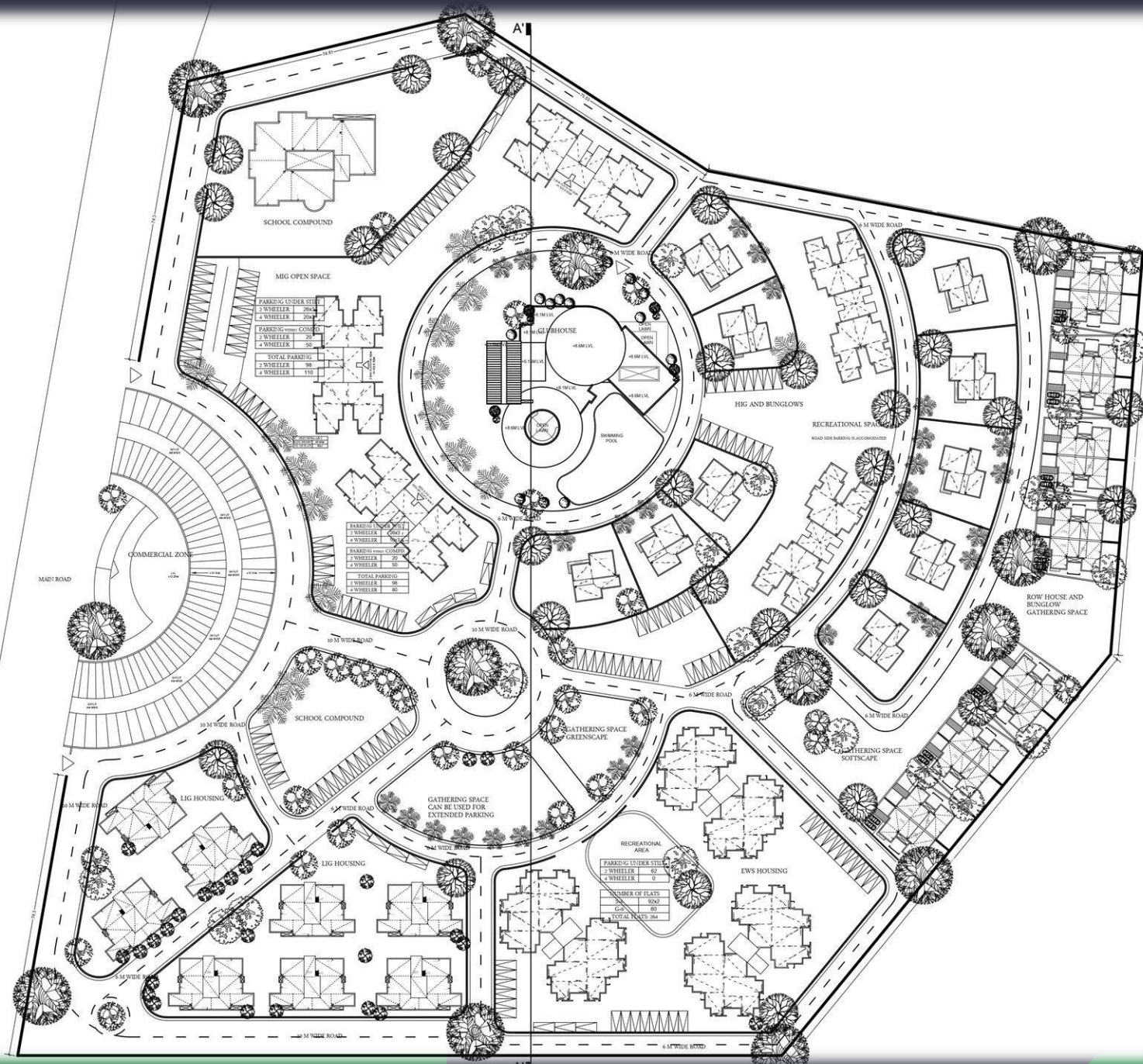
Total plot area : 60,000 sqm

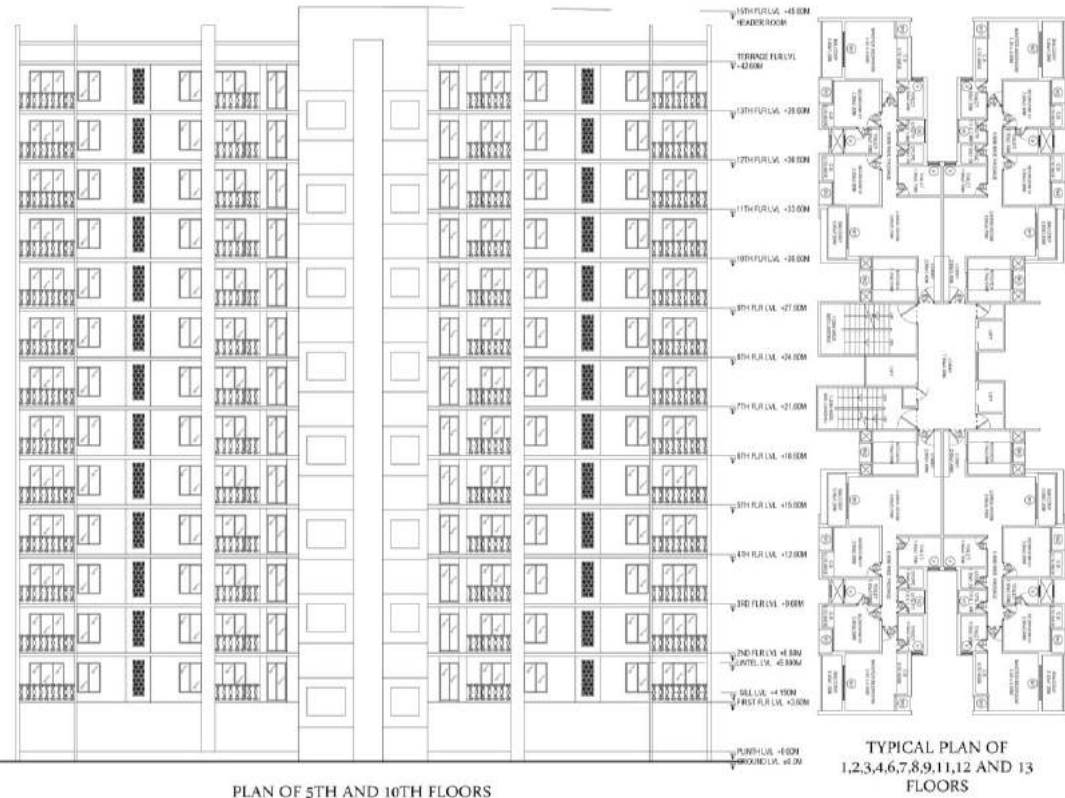
FSI : 1.25

Ground coverage : 30%

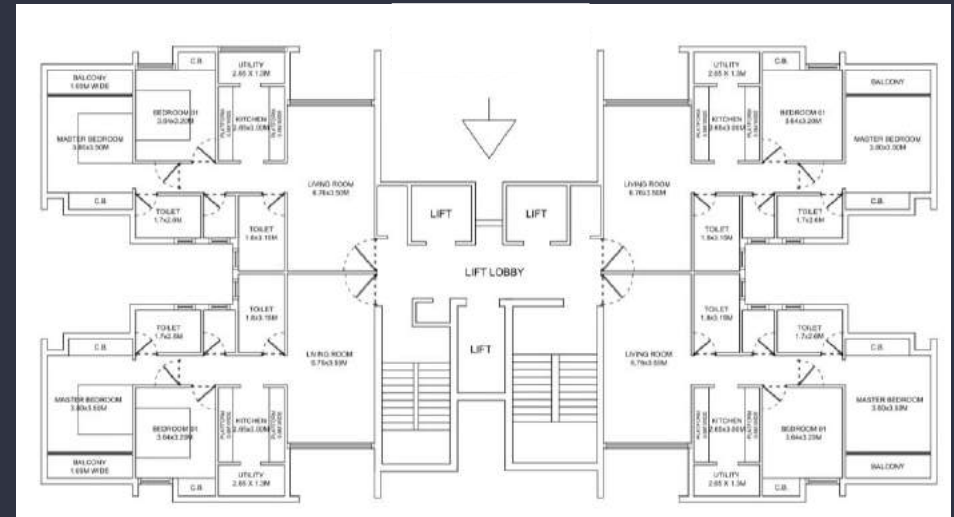
Requirements:

- Housing for EWS(250), LIG(150), MIG(100) & HIG(90) income groups.
- Bungalows-10 nos. and row houses-14 nos.
- Commercial(10%), clubhouse(6%), school, parking, gardens, and public gathering spaces.
- Services roads, main roads-12m wide, internal roads-7m and private roads-4m.





HIG



MIG APARTMENTS 2 BHK

AREA 80 SQM

UNITS 100 NOS

NORTH-EAST FACING BUILDINGS

Requirements:

- Housing for EWS(250), LIG(150), MIG(100) & HIG(90) income groups.
- Bungalows-10 nos. and row houses-14 nos.
- Commercial(10%), clubhouse(6%), school, parking, gardens, and public gathering spaces.
- Services roads, main roads-12m wide, internal roads-7m and private roads-4m.

HIG APARTMENTS 3 BHK

AREA 95 SQM

UNITS 90 NOS

SOUTH-EAST FACING BUILDINGS

EWS 1RK

AREA 95 SQM

UNITS 250 NOS

EAST-WEST FACING BUILDINGS

EWS





BUILDING SERVICES

- The main agenda to built a solar park is to provide a heavy number of recipients with the renewably generated power/ electricity. Which requires a brief understanding of the working of harvesting the solar energy and converting it into the usable energy forms.
- The working of a solar park heavily depends on the study of working of a solar panel, its collection, conversion, transmission and distribution.
- As from the observations recorded in the Gujarat Solar Park, providing services for a solar park contains more technical approach than creative.



GUJARAT SOLAR PARK

CONCEPT & WORKING

- However, the main components of harvesting solar energies are photo voltaic cells, to develop electricity and solar heater, to develop heat energy.
- When crating a mass of varied recipients, it proves beneficial to provide the electric power which has the means to be converted into the various energy forms required in the functioning of day to day life.
- In the Gujarat Solar park all the systems used and installed were of latest form.



SCHEMATICS

- LOCATION – Charanka Village, Dist. Patan, Gujarat.
- PLOT AREA – 2200 Hectare
- HUMIDITY – 86%
- WIND – 6 kmph
- MAX ALTITUDE - 32 m (Above Seal level)

OVERVIEW

SERVICES IN SOLAR PARK

- Accessibility
- Water Supply
- Electric Supply
- Sanitation
- Fire Fighting Requirements

1. ACCESSIBILITY

- As a part of the development of the Solar Park, construction equipment and resources, etc., have to be moved to the site by trucks of 60 to 80 tones.
- Invariably, the trucks used to get stuck in the road, hence safe accessibility to the project site was the biggest challenge. Existing road was upgraded to NH standard in a record time including construction of 42 Cross drainage structures.



2. WATER SUPPLY

- There is a possibility to use the discharge well and rain water harvesting to meet the water supply needs.
- Daily requirements for water, approximately calculated, sums up to 60 Lac litr per month.



ELECTRIC SUPPLY

- In the Gujarat Solar Park, 66 KV and 220 KV Sub Station along with transmission lines were commissioned by CETCO.
- For the proposed site a sub station of 20 KV is adequate enough.

- The facilities provided in the Solar park are very basic in nature and they do not need to develop any advanced sewage disposal techniques.
- In Gujarat Solar park - They have built a concrete septic tank for the use in the main GPCL office services. Capacity of the septic tank at GPCL main office is 2450 Ltr. Various offices also use the soak pit.



3. Fire Fighting requirements

- There is no specific requirement for fire fighting in a Solar plant, but few of the equipment's requires advanced techniques for ventilation and are prone to high temperatures. Hence the prevention methods.
- In Gujarat Solar Park - In the Inverter room at a 10 MV plant, they use the extensive ventilation technique to keep the temperature in check. It is also equipped with CO₂ fire extinguisher of 20 kg.

SOLAR PARK

- The concept of the Solar Park is the generation of the renewable energy to support, assist and fulfill the energy requirement of a city, town or district.
- For example, the electricity requirement of the city district of Patan, Gujarat is 17000MW per day and to facilitate in fulfilling that requirement, the Government helped setting up the Gujarat Solar Park which in current date produces 650 KW of energy and deposits it in the Gujarat state grid.

Reasons for considering Solar energy

- Harvesting wind energy can prove difficult in many places in India due to the steady wind currents over major plateau based cities and states.
- Along with that, the installation of the wind mills are very expensive due to high rates for import expenses, logistics, installation and maintenance.

Benefits of a multi-developers, multi-beneficiary Solar Park

- The concept of solar park demands the land use of approx. 750 acres.
- This land is then developed by a single developer or corporation.
- They convert the land to accommodate a number of sectors which are available for various companies or organizations to hire and install a solar plant.
- This provides the developers the opportunity of renewably progressing the city and promotes usage of renewable sources of energy.
- There are various Incentives provided by the Government for these organizations.

METHODOLOGY

- As the Solar Park promotes the use of renewable sources for energy generation, the approach to a more sustainable methodology of construction will appreciate the purpose of this project.
- Acknowledging the various techniques of sustainable construction also included the services which can be incorporated into the project. These services will be further discussed in the report.

STRUCTURAL SERVICES

Treatment of Grey Water

- The structure in Auroville uses the cheapest technique of grey water treatment.
- The waste water from the bathrooms, washing areas, kitchens and gardens are let into an reverse osmosis tank through a filtration trap.
- This allows the chemicals and other sediments to filter out from the water and the water can again be send into the usable cycle for reuse.



RO tank for Grey wastewater Treatment @ CGH

Kitchen and Mess

- The concept of the solar Kitchen works on the use of solar heater to cook food for a bulk mass.
- This concept can be used in the mess provided in the Solar Park for the used for the staff as well as the visitors.



PROCESS OF HARVESTING SOLAR ENERGY



IMAGERY OF SOLAR PARK



PHOTOVOLTAIC ARRAY CONTROLLERS

- In Gujarat Solar Park - they use the various pyrometers to study the detailed minute by minute angle of incident radiation or irradiation which displays the reading in the Main Control Unit (MCU). This allows to increase the efficiency of capturing maximum Sun radiation at the best angle possible.



Rainwater Harvesting

- Implying the use of run off water during the monsoon helps the occupants to cover the requirements of water use.
- Mostly the rain water harvesting tanks are built during the construction of the projects but sometimes due to funding, the architects develop this system during later stages like in Savitri Bhavan.
- The estimation is that it will cover 45% of requirements during regular monsoon season.



Sanitation and Toilets

- Mainly all the structures in Auroville uses Soak pit as their Sewage solution.
- Along with that they have developed Multiple use of septic tank and the Organic toilets



OHT's and UGT's

- The UGT and OHT required are of very basic nature but the designs of the OHTs can be innovated.
- UGT's also can be added as aesthetic features.



RELAXATION PONDS

- These ponds are used for lowering the temperature during the summers and retreating monsoons.
- Also, they use the water bodies for other activities like koi ponds, aqua-puncture ponds, etc.



SERVICES FOR THESIS

TOPIC - BIOLOGY AND ARCHITECTURE
PRESENTED BY - SHARMIN SHAIKH
YEAR V - SEM IX

MISCELLANEOUS

- Various options for other services which will suit well with the project due to its minimal cost and sustainable approach.



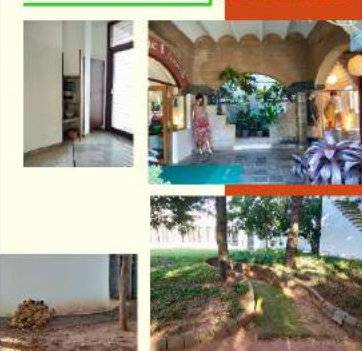
SUBMITTED TO - ANKLESH SIR
DATE - 20/10/2018
SIGNATURE -
REMARKS -

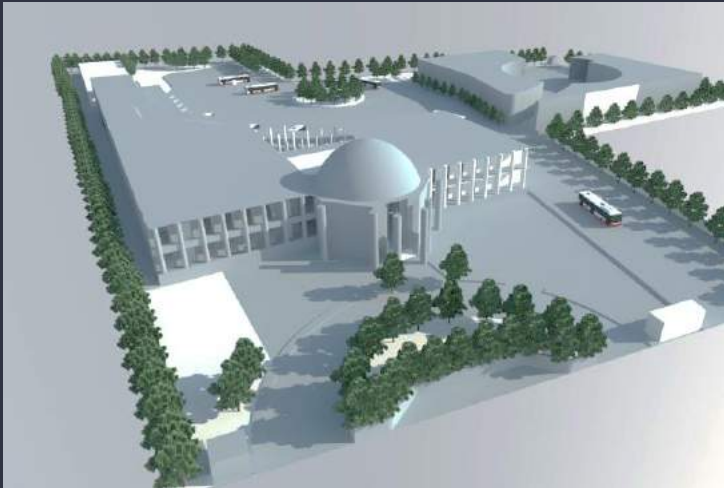


RELAXATION PONDS

- These ponds are used for lowering the temperature during the summers and retreating monsoons.
- Also, they use the water bodies for other activities like koi ponds, aquapuncture ponds, etc.

MISCELLANEOUS





THANK YOU

THIS WORK IS IN ATTACHMENT

SHARMIN SHAIKH