



## UNTRAVERSED

### Introduction / Background

Mixed use developments have been around for as long as the mankind. The Romans built large multi-use complexes across their empire, then in medieval times, people used to manufacture, sell and live in the same building. After industrial revolution, trade was separated from homes, which led to segregation of uses at city level.

Mixed use developments are a combination of residential and non- residential buildings. These projects aim to offer a variety of benefits such as improvement in home affordability, walkability between housing, work places and other amenities; stronger neighbourhoods. Done right, such developments are designed to incorporate various types of real estate together in a complementary way.

Mixed use can be either horizontal or vertical, or a combination, depending upon the land parcels size. With such large developments, comes the need for parking areas, amenities, efficient circulation, and the best configuration of services. Clear demarcation of the functions of amenities as well as entrances is imperative. Furthermore, retail centres create a lot of noise, pollution; and attract large populations of "outsiders". Such issues are pivotal in design of residential areas on site.

Such large-scale projects have direct and indirect impacts on the physical environment namely the natural resources such as soil, hydrology, air quality, water quality, noise, and landscape; storm water management, solid waste generation, and transport and traffic implications. Thus, it is vital that we alter the design process to minimise the detrimental impact on the environment and create projects which harness the climate, site conditions and use resources available on the site.

Lives are becoming more fused, and the boundaries between family life, social life and work, are gradually disintegrating. In response, the built environment must adapt, offering greater flexibility and efficiency, while helping citizens to reach for a

richer, healthier, happier future. It must be our endeavour to ensure that this built environment is sustainable, and resource efficient.

## **GRIHA – Green Rating for Integrated Habitat Assessment**

GRIHA is India's National Rating System for Green buildings. It has been developed by TERI (The Energy and Resources Institute) and is endorsed by the MNRE (Ministry of New and Renewable Energy).

It is based on nationally accepted energy and environmental principles and seeks to strike a balance between established practices and emerging concepts, both national and international. GRIHA attempts to minimize a building's resource consumption, waste generation, and overall ecological/environmental impact by comparing them to certain nationally acceptable limits / benchmarks.

GRIHA rating system consists of 31 criteria categorized under various sections such as Site Planning, Construction Management, Occupant Comfort and Wellbeing, Sustainable Building Materials, Performance Monitoring and Validation, and Innovation.

GRIHA consists of some core points, which are mandatory, while the rest are optional. Different levels of certification (one star to five stars) are awarded based on the number of points earned. The minimum points required for certification are 25.

## Design Brief

Design should be a mixed use (Residential and Commercial) development for **Experion Developers**, which is a reputed developer committed to sustainable development.

The project site is adjacent to the new High Court complex, Lucknow which is to its North and Indira Gandhi Pratishthan, which is to its West. The site is accessible from the existing 30-meter-wide Pickup Bhawan road to its South and connecting 24-meter road to its East, both connecting to the Amar Shaheed Path towards North.



## Basic planning byelaws of Lucknow

<b>Site Area</b>	: 6.81 Acres (27573.95 m <sup>2</sup> )
<b>FAR</b>	: 2
<b>Maximum ground coverage</b>	: 30%
<b>Green Area required</b>	: 10% on virgin soil
<b>Population</b>	: 5 persons per flat

## Parking requirement

<b>Commercial/retail</b>	: 1.5 ECS per 100 Sq. m of covered area.
<b>Residential flats</b>	: 1 E.C.S for 1 BHK
	: 1.25 E.C.S for 2 BHK +study.
	: 1.25 ECS for 3 BHK and 3 BHK + servant unit.
	: 1.5 ECS for 4 BHK + servant unit.
<b>Setbacks</b>	: As per NBC

## **Requirements: Residential Towers**

- Residential towers having product mix as specified below:

DISTRIBUTION OF RESIDENTIAL FLATS		
1	2 BHK +STUDY	45%
2	3BHK	27%
3	3BHK+SERVANT	20%
4	4BHK +SERVANT	8%
	TOTAL	100%

- Lift lobbies and corridors should not waste the F.A.R.
- Provision of Drop off areas for towers.
- The height of the buildings located in the proximity of the High Court cannot be more than G+11 floors.

## **Requirements: Commercial building**

- Commercial building consisting of at least two floors of retail, whereas rest will be offices consuming F.A.R of 8000 Sq. m of permissible F.A.R.
- The building should be planned facing 30 m wide road.
- Design must consider local materials, and energy efficiency.
- Separate entrance and exits should be created for residential and commercial blocks. Even ramps to the basement should be planned in such a

way that parking layout for both residential and commercial basement is separated without any physical barrier.

## Requirements: Club House

- Approximate built up area of 15000 sq ft.
- Facilities: Banquet hall / multipurpose hall, Pre-function area for banquet kitchen, toilets, entrance lounge, squash court, children play area, Library, yoga room, TT and snooker room.
- Swimming Pool area with kid's pool, steam sauna, spa for ladies and gentlemen, Auditorium, Gymnasium etc.

## Other Amenities to be planned in complex:

Entry Court, Pedestrian Spine, Stepped gardens, Multipurpose Lawn, Club Top Terrace Pool & Deck, Club terrace garden and Sky lounge, Spill out courts, Internal Landscape Courtyards, Club Drop-off Plaza, Children's Play Court, Multipurpose Court / Basketball Yard, Spectator Gallery for basketball court, Cricket Crease, Tower Drop Off Garden, Amphitheatre, Yoga mound & Think tank, Senior Pavilion, Fitness Garden, Shaded Contemplative garden, Water feature Wall, Ramp to basement, Orchard Garden, Fitness strips, Jogging loop, Formal Garden, Leisure Walk, Exit Plaza

## Deliverables

Following should be included in the deliverables:

- Design concept highlighting the climate responsive and passive features of the proposal.
- Demonstration of architectural strategies to inculcate sustainable behaviour in the users.
- Site layout plan and building layout plans with details.

## Parameters of Evaluation

- **Innovation in architectural design** **70%**
  - Effectiveness of the design in influencing user behaviour to be more sustainable through spatial experience.
  - Design response to the site and spatial functionality of the scheme
  - Passive design methods and design response to climatic conditions
  - Use of local, innovative and sustainable building materials
- **Presentation of the scheme** **30%**
  - Design representation through drawings
  - AV presentation



## Submission Details

### STAGE 1: Online Submission and E-Jury

The trophy will undergo the process of E-Jury where all the entries will be submitted on the website and will be taken to the panel of jurors.

The maximum file size should be **25mb** and it is important to note that the file shouldn't be compressed to very low quality as these sheets will be uploaded in the Online Library and will be open to Live exhibition during the convention,

Maximum number of sheets not be exceed **SIX A1** (594 X 841 mm) sheets.

### Documents required

- Site plan and layout plan
- Concept plan, Plans, Elevations and Sections
- Views, perspective and any other means may be used to explain the design proposal.

Note: Scale of the drawings is at the discretion of the participating colleges. All entries must be prepared using metric units of measurement.

### STAGE 2: AV Presentation

Jury members shall shortlist the colleges for AV presentation. Only two students from one college will be allowed to give the AV presentation. Time given for the short-listed entries shall not exceed 15 minutes. No college shall reveal its identity during the presentation.

### Check List For Submission

- Soft copy of submission in pdf to be uploaded on NASA India website [www.nasaindia.co](http://www.nasaindia.co)
- Authenticating letter from college HoD for each entry that the work submitted is genuine, original and they hold endorsed copyright for the same and with the name of Participant and stating the unit shall abide by whatever may be the final results and also agree that this entry is property of NASA India.
- Declaration by the participant stating the work submitted is genuine and they have endorsed copyrights for the same and to adhere by all the rules and regulations, Jury process and the results.
- Editable format of the sheets has to be submitted during the Annual NASA Convention (Applicable only for shortlisted entries).

## Important Dates

- The release of brief - 02/11/2018
- Registrations open - 05/11/2018
- Registration closes on – 01/12/2018
- Queries till – 01/12/2018
- Submission deadline – 15/12/18

## Other Submission Guidelines

- All individual sheets and panels shall have the NASA logo as per NASA logo guidelines.
- The entry code should be used as per the entry code list provided. The entry code should be placed in bottom right of all sheets next to the NASA Logo.
- In AV Presentation, NASA logo as per NASA logo guidelines is mandatory.

**Note:** The identity/name of the participating college should NOT feature in any way on any of the Presentation sheets/AV presentation. All colleges are requested to adhere to the mentioned specifications, failing which the entry will be disqualified.

## Other Information

- Registrations and submissions should be done by the Unit Secretary in NASA India website before the deadline failing which the submission shall be considered incomplete.
- Kindly print the form on the college letterhead along with the attestation by the college HoD/Principal/Director and uploaded the scanned copy of the same during registration.

**Any Kind of Queries need to be submitted through website to**

**Kushal Surana**

National Vice President 2018-19  
NASA India