

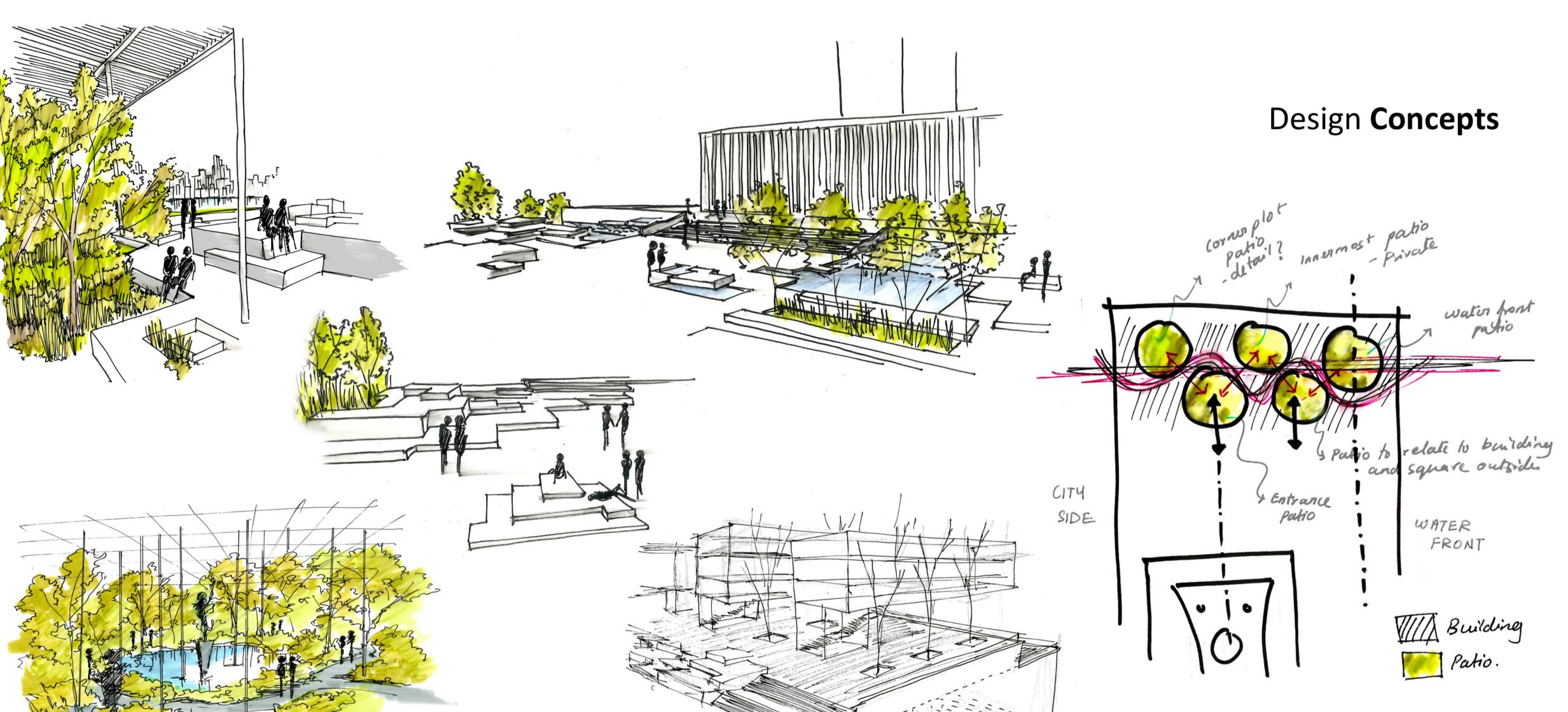
# the green lantern lighting the path forward

## **Problem Statement**

To generate a masterplan that solves the existing problems around the plot and provides a better quality environment.

Provide the city with an open space park in the plot, which the New Yorkers and tourists could enjoy.

Design the UN Headquarters of Sustainability, or the UN Environmental Council, in the existing United Nations plot in New York City.





Energy Concepts





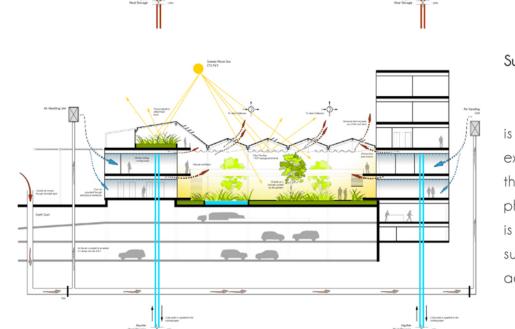
#### of the experience in the patios Left and Below - Visualizations of the entrance patio

Top - Conceptual sketches

### A museum of lush green patios

The concept of the building is to try to incorporate an office into a lush green space that would not only help in greatly improving the quality of the working environment but also the presence of the patios would ultimately work towards the sustainability of the complex.

The theme is to make every user travel through patios that are filled with water and greenery to reach a certain function unit. It would be exemplary of rejuvenating ecology at the building site and maintaining a close relationship with nature.



### Winter situation - Climate design

Primary heating/ ventilation is fed into rooms from an AHU whose load is reduced by the use of an earth duct. The exhaust is let into the atriums and the heat is recovered by heat collectors on the glazed roof. Under floor heating pipes are used for secondary heating, further reducing the energy loads.

### Summer situation - Climate design

Primary cooling/ ventilation is fed into rooms from an AHU. The exhaust is let into the atriums and the heat is let out into the atmosphere again. Secondary cooling is through a climate ceiling which is supplied cold water stored in the aquifiers underground.



Rain water is collected from the extensive gable roof and fed into the patios. The soil acts as a cleansing biotope and initially used in the mini ponds as an aesthetic feature. The excess water is stored underground and later used for gardening, firefighting, etc.

Daylight is used to provide natural lighting to the interiors.

Decks provide shade during summer, while light shelves improve the lighting during winters.



While the exterior of the building is designed in the form of solids (concrete surfaces) and voids (glazed patios), the interiors are treated predominently with wooden facades and sprawling greenery to create a natural experience. The interior gardens balance temperature extremes; the garden also provides gorgeous views for relaxation and usable space for employees in the form of green working spaces.

Apart from solving the energy concepts of the building, constructions details were also refined for choice of joinery, materials and resolving structural and climatic design calculations.





