**PLANNING, ANALYSIS AND DESIGN OF RESIDENSIAL BUILDING(G+1)**

**ABSTRACT:**

* This design project is to create a functional 4BHK residential building with reinforced concrete elements.
* The design complies with Indian standard codes **(IS456:2000) , (SP-16**for concrete structure design.
* Reinforced concrete, a durable and sustainable material, is used to create various structural elements such as beams, columns, slabs, footings, and staircases.
* The building consists of two floors which includes a variety of amenities such as a kitchen area, Primary Bedroom and Secondary bedrooms, Sit out, an open dining hall, stairs, and an indoor home theater.
* The residential building consists of 15 columns & 15 footings with a built-up area of 198.8 square meter.
* Location of the building for construction is Thiru Nagar, airport backside, Trichy
* To create a sustainable and better form of 4BHK residential building to meet the existing and future demands and to reduce the environment impacts on building and draw using AUTO CADD.
* To analyze the Moment and load distribution of the structural components to ensure the structural integrity of the building and design the structural components.
* Create functional and efficient layout that includes a kitchen, dining area, restrooms, and storage spaces.
* To prepare the project report based on the analysis and design of the structure.

METHODOLOGY

