

Plotting of Land by Drone Surveying

Mahendrakar Hemanth Kumar¹, Putha Jishnu Ram², Sarvani Fuzail Arfath Khan³, Jadav Mahidhar⁴

Assistant Professor, Civil Engineering¹

B. Tech Students, Civil Engineering^{2,3,4}

G. Pulla Reddy Engineering College (Autonomous), Kurnool, India

Abstract: *In construction projects, the accurate plotting of any land area, surveying method is one of the most essential processes in the planning phase. In following that, some traditional surveying techniques were followed (Chain Surveying, Compass Surveying, and the use of Total Stations) requires significant manual effort and can be time - consuming, especially when surveying large areas spanning hectares of land. To address these limitations, drone-based surveying offers a more efficient alternative. This project aims to survey the land using a drone equipped with Real-Time Kinematic (RTK) technology. The Ground Control Points (GCPs) and images captured by the drone will be stitched together and exported to AutoCAD software for plotting. The results from drone surveying are expected to be more accurate and faster than those obtained through traditional methods. Additionally, this project seeks to evaluate the challenges and capabilities of drones in surveying various terrain features*

Keywords: Drone Surveying, Flight planning app, Laptop/software for post-processing, Camera

