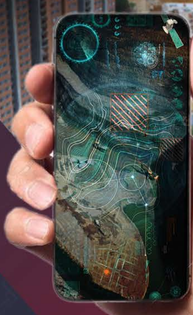
Case Study

VOLANT

Water Analysis for Construction Company

Situation

An international construction company that was developing an apartment complex was facing government fines for the supposed misuse of natural waters. They needed to find the source of the water and monitor quality. They also needed to understand the risks associated with potential flooding and other environmental implications and plan around them. The core solution focused on aerial mapping to inform decision-making and enable the company to develop an efficient plan toward compliance. An intelligent 24/7 monitoring system, enabled by 30X Zoom/ Thermal cameras and numerous IoT sensors was the ideal tool to support the construction process and both ensure and prove governmental regulation compliance into the future.



Objectives

- Determine the Cause of Water Contamination
- Reduce the Risk Associated with Flooding and Contaminated Water
- Increase Safety, Security & Environmental Compliance

Plan

Step 1:
Provide a Comprehensive 350-acre Map of the Construction Site and Adjacent Areas

Step 2:
Provide Precise Planimetry and GIS Analysis via Photogrammetry

tep 3:
Identify Water Sources via Drainage Lines

Step 4:
Identify Flood Prone Areas

Step 5:
Install IoT Sensors to Monitor Water Quality Variables

Step 6:
Install AI Cameras to Provide Time Lapse Construction Videos

Results

- Identified Cause of Water Contaminants from a Nearby Quarry
- Identified Water Sources, Creeks, Manholes and Underground Water Drainages
- Increased Efficiency in Operations
- Increased Confidence in Contamination Detection
- Avoidance of Costly Environmental Fines