

# Drones support full construction lifecycle developing a Building Information Model (BIM) for every site

*Drones can be used throughout the construction life-cycle process to accumulate the data for developing the BIM for any particular construction site*

CAPE TOWN, WESTERN CAPE, SOUTH AFRICA, February 6, 2019 /EINPresswire.com/ -- [UAVs in CONSTRUCTION](#)

FROM [AIRBORNE DRONES](#), <https://www.airbornedrones.co/>

The following types of data during the [construction](#) process can be collected using the AIRBORNE DRONES' Vanguard platform:

- 2D Mapping: Visual, NIR and DEM.
- 3D Data: LiDAR
- Raw Imagery: Aerial, Thermal, Multi-Spectral

## Construction Investment Monitoring

Real-time awareness and accuracy have always been challenges on construction sites. CONSTRUCTION PHASES. OPPORTUNITIES FOR UAV ASSISTANCE Drones can be used throughout the construction life-cycle process to accumulate the data for developing the BIM (Building Information Modeling) for any particular construction site:

### PRE-CONSTRUCTION PHASE

significantly improve the speed and quality of the design process. by providing better field data,

capture high-resolution videos and images, enabling 3D modelling and providing data about a site's initial status for investors and property owners before work begins.

enable the creation of Digital Terrain Models (DTMs), which ensure better contract valuation.

### CONSTRUCTION PHASE

quick surveys of sites and for the precise gathering of data for progress reports.

monitor progress by imposing overlays of plans onto photos of the actual state of construction, in addition to identifying discrepancies as small as 1 cm, and simultaneously verifying contractor reports.

check whether site borders have been crossed, and confirm that materials are being stored and handled correctly.

Provide investors with swift access to complex data, enabling a fast reaction and an effective analysis of results. UAV technology allows investors to monitor contractor engagement and receive complete, trustworthy documentation.

Use accurate data gathered by drones to perform precise work such as positioning steel slabs in concrete or measuring the depth of pipelines, preventing costly and dangerous construction errors.

Drones further increase safety by performing hazardous work, and by monitoring construction areas for possible sources of risk and accidents.

### POST CONSTRUCTION.

final work assessment,  
environmental impact verification and reporting.

used for maintenance and marketing purposes.

#### MAINTENANCE

Using UAVs much of the current approach can be avoided where work is performed: manually, based on in-person inspections, in some cases, rope access, scaffolding and elevated platforms are necessary, with the need to turn off the installation for the duration of the maintenance.. Locate defects faster, more thoroughly, cheaply and safely.

#### ASSET INVENTORY

Drones can be used in stocktaking and inventory management for infrastructure companies. Performing inventory assessments with UAVs allows companies to cut costs and accelerate the entire process, while providing more detailed information about the assets. It also increases workplace safety, as rotary-wing drones can fly into places that are difficult to reach without risking human lives.

The best example may be inventory of telecommunication and broadcasting masts, and the devices installed on them.

Use optical barcodes and (RFID), makes the process safer and much more efficient.

Database integration makes the cataloguing process more detailed and more reliable.

#### THE VANGUARD TURNKEY SOLUTION FOR THE CONSTRUCTION INDUSTRY

Our total solution is the Vanguard+ drone system, all Vanguard systems have an achievable flight time of 74 minutes, a range of 35km and a payload of up to 2kg - this system comes with our Datalink Configuration, enabling the range of 35 km with encrypted live video for the entire duration of the flight.

The Airborne VANGUARD supports detachable arms for simple and compact storing in a rugged Aluminium Carry Case, allowing the drone to become fully deployed or stored in under a minute. In addition, the VANGUARD supports a straightforward on-the-field arm replacement capability without requiring repair assistance.

Gideon Gerber  
Airborne Drones  
+27 87 550 4319

[email us here](#)

Visit us on social media:

[Facebook](#)

---

This press release can be viewed online at: <http://www.einpresswire.com>

Disclaimer: If you have any questions regarding information in this press release please contact the company listed in the press release. Please do not contact EIN Presswire. We will be unable to assist you with your inquiry. EIN Presswire disclaims any content contained in these releases.

© 1995-2019 IPD Group, Inc. All Right Reserved.