

**Use case** 

# Maximize efficiency with digital reporting for infrastructure construction



# Leverage advanced analytics and digital reporting to improve productivity, profitability, and site safety



## **Cross-section volume reports**

- Easily track and measure the progress of each road section
- Use this information to accurately calculate compensation based on completed milestones
- Easily visualize and understand road design, collaborate with all stakeholders and enhance project efficiency
- Replace guesswork with verifiable and consistent progress reports

### Volume grid and heatmap reports

- Achieve accuracy in earthworks for infrastructure developments
- Access survey-grade data on volume that considers factors such as slope and distance
- Easily visualize changes in elevation at a glance and observe and analyze alterations in cut and fill areas
- Track progress and assess productivity by comparing two specific dates
- Estimate resource investment or quantify inventory by comparing the current terrain against the final design







#### **Grade checking reports**

- Generate grade checking reports to quickly identify any discrepancies by viewing the height differences that exist between the design and the actual
- Evaluate whether there are gaps between layers that need to be filled, or sections need to be cut due to excessive material on a particular layer in a specific area
- Use the color-coded, easy-to-read list of measured points to quickly identify any problem areas that need to be rectified

# Example

#### Background

- The design, planning and construction of large highway intersections come with multiple challenges.
- In the case of a complex highway section, this was made even more challenging as the project involves more that 15 roads including bridges, tunnels, off-ramps and on-ramps.
- Each road within this intersection project boasts a distinctive design, tailored to meet specific requirements for design strength and usability. These unique designs are essential for the overall functionality of the intersection.

#### Solution

- The company managing this project used DatuBIM to monitor its progress.
- One of the main reports used was the Cross-Section Volume report.
- This report can be generated quickly and shows the volume calculation for every section required.
- The report includes all the information that is normally included in a professional surveyor report.

#### Added value

- With this report, which also includes a dynamic view that can be accessed via our cloud-based platform, all stakeholders quickly receive the accurate information they need to closely monitor projects – without having to be onsite.
- This leads to major time and cost savings.

