



# VSL Asia Pacific: Revolutionizing Bridge Inspections in Brunei

Unlocking the power of digital condition assessments for bridges and culverts.

#### Overview

- VSL conducted a level 2 condition assessment on the Raja Isteri Pengiran Anak Hajah Saleha bridge in Brunei
- Screening Eagle Inspect software was used to capture, manage and report inspection data
- The VSL team significantly increased their productivity with their digital end-to-end inspection workflow

VSL Asia Pacific, part of VSL International, are specialists in the construction and repairs of post-tensioned and cable-stayed structures, foundations and ground engineering.

# Challenge

The site inspectors at VSL perform inspections for over 1000 bridges and culverts in Brunei to check the sites for any defects. In the past, they would use traditional visual inspection methods including taking measurements and photos of the site, documenting on paper any issues they find. Paper reports were then produced using the notes collected.

These methods brought several challenges including revisits to the same site if they needed other photos or measurements. It was also difficult to measure non-accessible areas of the bridge, and the manual process of taking photos and recording measurements, was time consuming.

The site inspector would also be required to return to the office after every inspection, to deliver the results.

### Solution

VSL decided to try using Screening Eagle Inspect software for their data capture, management and reporting.

Inspect software is particularly useful for condition assessments on bridges and other infrastructure as it streamlines the entire process. For the team at VSL, they use it to transform their data collection, from manual to digital, saving hours of time in the field.

Instead of marking down on paper which span contains the defect, the team can now create a geolocated Spot on the iPad, containing all notes and photos of the defect. This makes it far more efficient to identify the precise area for further assessment.

Furthermore, the data collected in the field can be viewed back at the office in real-time, meaning no more revisits to the same site as the data can be verified immediately. This leaves the site inspector free to move onto the next inspection.

For the difficult to access areas, Inspect enables 3D scanning of the defects. The team can then select the area, view and measure it effectively. For those far away areas, Inspect can be used with any camera to zoom into the defected area and add those photos to the geolocated Spot. The 2D and map views of the data also boosts efficiency, making it easy and fast to get the information needed about the asset.

## Results

The VSL team captured all measurements and defects in 3D, giving their colleagues back at the office a 360-degree view of the defected area. With <u>Screening Eagle Inspect</u>, there's now no need for the site inspector to return to the office after every inspection, since the reports can be generated immediately, conserving hours for the team.

There's also no longer any risk of needing to revisit the same site again and again, as everything is geolocated and stored securely in one place, ready to share with the draftsmen and stakeholders when needed. Since the data is viewed in real-time at the office, the manager can also request more photos if needed, while the inspectors are still onsite. This results in much more convenient inspections, less time on reports and a highly productive team.

"INSPECT makes our tasks easier, and enables us to streamline all visual and NDT data."- Narciso Pacuribot.

Check out the full testimonial video with the VSL team.