INNOVATION, SUSTAINABILITY + DIGITAL IN PRACTICE

ISDIP

ISDIP 049	Timelapse Cameras.
Date	Nov 2023
Business Unit	BPC, FCC
Project & Region	Various
ISC Themes	• Management and Governance • Emissions, Pollution and Waste • People and Place • Innovation

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1 What Happened?

Over the years, a growing demand has arisen within project teams for effective CCTV and timelapse monitoring tools. The evolution began with the introduction of digital cameras, gradually progressing to the adoption of timelapse camera systems. Technological advancements have been evident – from basic setups at Mangere Wastewater Treatment Plant, to more advanced configurations like Coalface cameras at Ardmore, Auckland Airport, Waikato 50, and Papakura Water Treatment Plant. While these legacy systems provided detailed information, there were challenges with user interfaces and the speed of timelapse video generation not meeting the site team and client requirements for faster access and turnaround.

2 What Are We Doing Differently?

The Wolverton Culvert Replacement project team was tasked by their client, Auckland Transport, to install a new camera system, but were only granted read-only permissions. This departure from our typical platforms prompted a comprehensive review of construction CCTV and timelapse camera options globally in early 2022. Recognising the need for improved technology, Justin Johnson and Liam Callaghan explored alternative solutions.

Timescapes Camera at Snells Beach WWTP

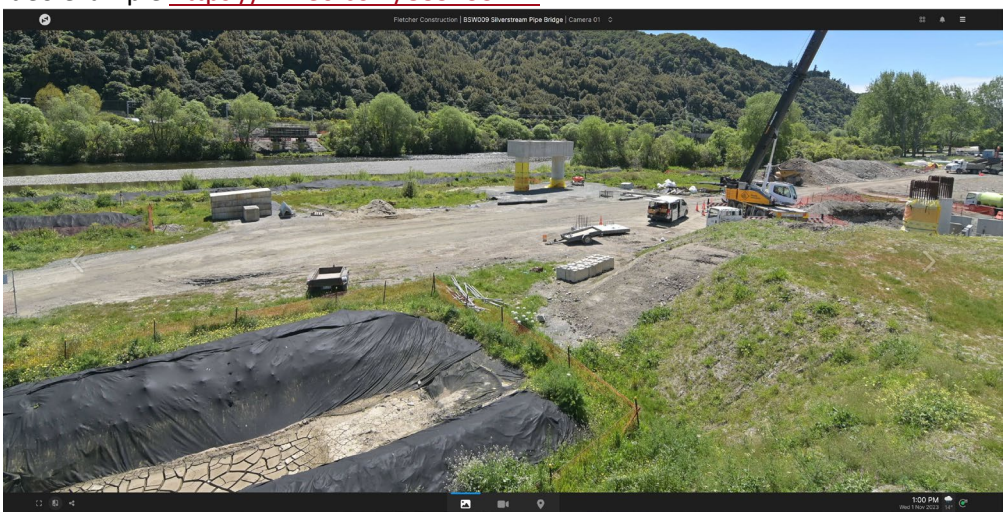
At the time, the systems in use included Coalface cameras, GoPro cameras, GoPro Fusion 360 cameras, Brinno Timelapse in a box cameras, and Perimeter Security remote systems. The emerging technology provider at Wolverton Culvert was identified as **TimeScapes**. A global sweep revealed other options such as EarthCam, Lobster Vision, OxBlue, and Evercam.

The criteria used to evaluate these options included 24-hour access with unlimited users, customisable capture intervals, the ability to create custom timelapse videos, Procore integration, ease of installation, power source (mains or solar), mobility, cloud uploading capabilities, remote access, ongoing charges, progress comparison to design models, camera types used, New Zealand-based companies, and the availability of local service technicians.

After rigorous assessment, TimeScapes, EverCam, and Coalface remained as potential choices. A series of trials and road tests were conducted, leading to the selection of TimeScapes as the preferred option for medium to large-scale BPC projects. While TimeScapes offers advanced features, the company recognises the need for cost-effective solutions in certain scenarios, allowing for flexibility in adopting alternative options.

Presently, TimeScapes cameras are operational at Snells Beach, Whakawhirinaki (Silverstream), with six cameras newly installed at RSS2 (Taxiway Mike), and proposals in progress for Riverlink and EBA. The benefits of TimeScapes include an intuitive online platform, AI-driven custom timelapse videos, solar power, Procore integration, analytical capabilities, and a strategic partnership with Adroit for combined data analysis and environmental monitoring.

Timelapse video example https://vimeo.com/885433411



Timescapes camera at Silverstream

3 More Information

If you would like to pursue Timescapes cameras for your project or need a quotation for a bid please contact: Justin Johnson justinj@fcc.co.nz and John Mellor john.mellor@fbu.com