

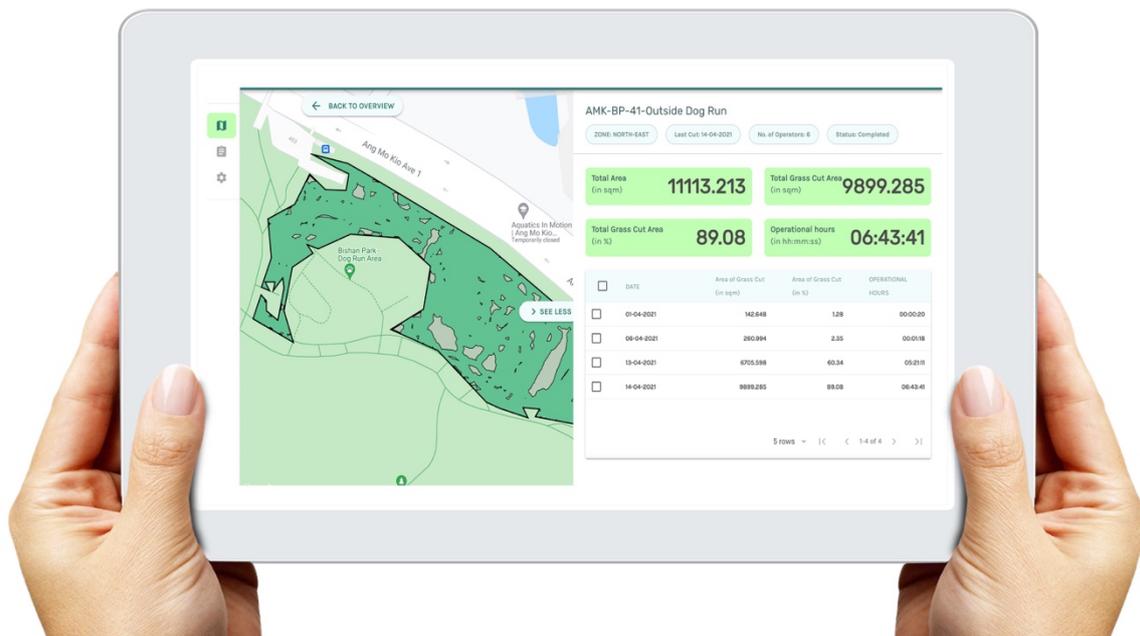
Product: urbanEye AI

Customer: National Parks Board, Singapore

Vertical: Landscaping / Urban Greenery

Problem:

The National Parks Board (**NParks**) manages over 13,000 hectares of green spaces in Singapore. The grass maintenance services for these areas are provided by grass-cutting contractors. Contractors and NParks staff would previously have to conduct sites checks on the quality and completion of the grass-cutting operation. With many locations and a large area managed by NParks, it is a challenge to physically monitor each location regularly.



urbanEye AI software, an AI-powered geospatial platform for outdoor works management was used for monitoring grass cutting work.

SOLUTION:

To overcome this challenge, NParks partnered with SpaceAge Labs to pilot a remote monitoring solution to measure the completion and quality of grass cutting work in real time. IoT devices are worn by grass-cutters using push lawn mowers or handheld grass trimmers. They can also be installed on equipment such as sit-on mowers. These sensors transmit data on the height of grass (post-cut) as well as high precision GPS location data to the cloud, available via **urbanEye AI** web dashboards and mobile apps, where contractors and NParks staff can easily verify the completion and quality

of the grass-cutting operation. This also helps to expedite payment to the contractors as NParks can quickly confirm they have completed their work satisfactorily. These operational data and insights enable the contractors to improve their efficiencies, through better deployment of resources, resulting in lower labour and fuel costs.



A grass cutter, wearing the Grass Height Sensor on the left of his hip

IMPACT:

*“NParks manages some 400 parks, 3,347 hectares of nature reserves, the Singapore Botanic Gardens, Pulau Ubin and the Sisters’ Islands Marine Park. It is important that we take steps to make operations more precise and think of ways to overcome physical and manpower limitations through the adoption of technology. Leveraging on SpaceAge Lab’s smart technology, we have been able to conduct grass height inspections more effectively with less manpower. The **grass height sensor** is currently deployed as part of the pilot of park and greenery management using digital tools in the Bishan-Ang Mo Kio precinct. This project supports our landscape sector transformation plan that aims to elevate and grow the local landscape sector through digitalisation, mechanisation and professionalisation,”* said **Mr Ryan Lee, Group Director**, National Parks Board.