



# Logistics Park Project Case Study

## Location:

Western Sydney, NSW, Australia

## Client:

Geomotion Australia

## Application Summary:

Monitoring ongoing settlement of engineered fill

## Tags:

ipx; settlement; consolidation; retro-fit; urban development;

## Description:

Nearly 20m of fill was placed to provide the foundations for a large logistics park in western Sydney. Due to the tolerances of the equipment used in logistics parks, differential settlement can cause significant problems. In order to monitor ongoing settlement of the embankment, two magnetic extensometers were installed with a view to monitor manually. Since the movements within the fill were very small, it was determined that the manual surveys did not provide the precision required. Osprey Measurement Systems were contacted to automate the extensometer to provide a higher degree of precision, and provide more frequent measurements to allow trends to be more easily identified. A low power digital data logger was connected to the IPX string for data to take measurement 4 times daily. The data is collected manually at regular intervals.

## Key Benefits:

- High Precision
- Automated
- Low profile headworks

The In-Place Extensometer offers automated sub-millimetric precision, meaning settlement trends can be picked up in a much shorter period of time when compared to manually monitored systems. Thanks to its low-profile headworks, the entire system, data logger included, can be housed within a 180mm flush well cover. This makes it ideal for installation in trafficked areas.



