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Jdata

### Case Study

## Kerikeri Irrigation data collection using Android smart phones



### The Challenge

To collect photographs and data of assets which are spatially in the correct place so that staff members can easily find the assets, even if they have never been to that location.

The system used would need to be simple, even though the data needed to be processed. As projections changed, the data would need to be manipulated so that hyperlinks could open the photos. It also needed to be executed the same way every-time to suit automation via Mapbasic.

The data needed to be accurate to less than 5 meters.

### The Situation

Kerikeri Irrigation had its infrastructure mapped over 13 years ago. Only a limited number of field staff knew the entire infrastructure location, what condition it was in and whether or not there were any other issues affecting the infrastructure.

### The Solution

Use Geopaparazzi from Android smart Phone. Collect photos and import them into Mapinfo Professional using Map Basic.

### What was learned?

As results were checked it was noticed that the phone GPS was not as accurate as hoped, particularly when looking at X & Y. If the Irrigation Company was looking for Z heights then this whole system would be nowhere accurate enough.

### The Fix

A better GPS was sourced and connected to the Android Phone. The decision was made to use Garmin Glo, costing only \$150. Connected by blue tooth, it is expected to be accurate to around 3 meters X & Y.

### The Result

Two hours were spent training a university student showing the processes required, the student took to the system like a duck to water. To date there are two types of data that have been mapped, these are points for text and photographs.

After a month of data collection - on and off - all has gone very well. Having photos added to the system confirmed for the company that their infrastructure was overall correct but may need to be slightly tweaked in the near future (with the odd valve or meter not be placed correctly or at all.)

The company was also pleased to discover that the photos can be used as a 'condition assessment' for any up-and-coming programmed maintenance.

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