Road culvert flow measurement

Most water districts have countless numbers of road crossings through which storm water and water channels are flowing. They can take the shape of a typically “boxed” section or a round pipe (both full or partially full). Road culverts therefore, provide an extremely precise cross-section through which to measure flow.

The flexibility of the MACE FloPro XCI for measuring these flows can not be overstated. No matter whether the culvert is “boxed” or “piped”, flowing partially full or completely full, there is a sensor configuration ideally suited. With the free software configuration tools FloCalc and FloCom; the user can simply enter the correct channel dimensions into the FloPro XCI device. With the ability to measure flow in multiple pipes or culverts, the MACE FloPro is an extremely affordable option where the user needs to measure flow under a road crossing with multiple cross-sections.

In the example shown, the FloPro XCI is measuring the velocity and depth of flow in twin pipes with MACE Doppler area/velocity sensors. With a MACE WebComm card installed, these readings are available 24/7 on the MACE website, as well as having the ability to be alarmed via SMS/email to any mobile phone.