



## HTL ADVANCED FLOOD WARNING SYSTEM



# **About**

# Us

At Harding Traffic, we are more than just a company; we are pioneers in traffic control solutions with a rich history dating back to 1966 when Harding Signals was incorporated. This marked our venture into electronic traffic signals.

In 1997, our area of operations moved away from Traffic Signals and into Electronic Signage and Traffic Management Systems. To reflect this, we changed our name to Harding Electronic Signals Ltd. Harding Traffic's integration into the Traffitech Group in 2007 marked a new era of growth, joining a group of companies boasting a robust financial standing with \$45 million in revenue, assets exceeding \$20 million, and a dedicated team of 180 staff and 6 locations across New Zealand.



Our journey has been marked by a steadfast dedication to innovation and quality, leading the charge in traffic control technology. With 1000's of the country's traffic signs installed by Harding Traffic over 27years, our impact is undeniable. Yet our ambition extends beyond electronic traffic signs; we've become a comprehensive provider of traffic management/warning systems, car park solutions, integrated traffic management solutions, data capture and analytics along with so much more. We are committed to enhancing urban infrastructure with our cutting-edge solutions.

Today, Harding Traffic stands as a testament to over 50 years of expertise in the traffic industry. Our capabilities extend across the design, manufacture, and installation of high quality, specialised traffic systems. This includes everything from Motorway signs and School Zone signs to Rural Interchange Advance Warning Signs, Illuminated Road Stud technologies, car park systems, electronic waning systems and off-street signage. We take pride in serving a diverse clientele that includes NZTA, local Councils and authorities, commercial entities and contractors.

### **Quality Guaranteed**

Harding Traffic holds AS/NZS 4801 Health and Safety Management certification, ISO 9001 manufacturing quality certification and ISO 14001 Environmental Management System certification. These certifications represent Harding's commitment to providing a consistently high level of service, delivery quality products based on sound management and process controls.



# Advanced Flood Warning System

### **Features**

- Transmits data to Oversite 360
- Activates Signs
- Alerts relevant subscribers via SMS or E-Mail
- Mains or Solar Powered
- Manage data online

Harding Traffic is pleased to introduce to our Flood Warning Systems that monitor flood-prone water courses where rising water risks treacherous driving conditions and temporary road closures.

We appreciate flood-prone locations often have their own unique and challenging characteristics.

These locations may require monitoring of rising water levels at critical locations and communication of real-time status reports to support teams.



Our Water Level Sensor comprises a robust 4-Stage Sensor assembly, a Control Box and a Solar Power System. It is combined with Pole-Mounted Electronic Warning Signs (EWS) to be located at appropriate road-side locations either side of the flood-prone area and a cellular modem for monitoring and alerting purposes.



Advanced Warning to motorists through the use of Variable Message Signs are an integral part of the solution, where most sign locations require signage with capacity to display complex messaging.

Other locations, such as a side road near a flood-prone area with low volume / mainly residential traffic, may not require variable messaging signs so a more appropriate Wig-Wag sign is offered to highlight the road conditions ahead.

Our experience has identified flood-prone sites over a wide geographical footprint, with multiple watercourses that can flood several different roads. Harding Traffic can provide comprehensive design, supply and installation services of our Advance Flood Warning System, specific to the requirements of each unique location. We work collaboratively with local roading authorities and maintenance contractors to identify the most appropriate locations to install our equipment.

In order to manage and operate a network of multiple sites with this range of flexibility and

complexity, the system logic is located within our cloud-based Central Management System. This gives the system the ability to select and distribute the relevant messaging commands from each water level sensor to specific signs and support staff/services. Furthermore, this can allow more dynamic logic to be applied where different signs have different messages based upon results and status of combinations of sensors rather than just a single sensor.

We can also make changes where and when necessary, significantly improving system efficiency and reducing on-going Management & Maintenance costs.





## How it Works



**Water Level Sensors**: Placed in rivers, streams, or flood-prone areas to measure rising water levels. Sensors send data to a locally placed control cabinet that can be Solar Powered or Mains powered.



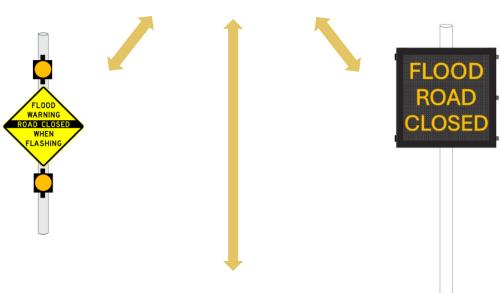
**Data Transmission**: Wireless Communication: Sensors send data to a central server using communication technologies like GSM, satellite, or the Internet.





**Central Monitoring System:** Data Processing Server: Receives, processes, and analyses sensor data to determine flood risk.

#### **Alert System:** Street Sign Activation



Automatic SMS, app notifications, or emails sent to officials in affected areas.

