Across the world the construction of drainage systems using pre-cast elements is being replaced by insitu slipform construction.

The reasons are quite simple and unambiguous:-

• Wholly mechanised process free from manual handling
• Reduced cost
• High productivity
• Rigorous process quality control
• Improved product durability
• Flexibility with minimal radii achieved with ease
• Reduced environmental impact

Extrudakerb are able to provide a wealth of experience for the design and construction of insitu slipform drainage systems. Extrudakerb are able to advise contractors how to best make use of the many advantages of the slipform process and accelerate programme but reduce costs.

Extrudakerb offer a range of insitu concrete drainage systems; being an equipment manufacturer as well as a contractor they can offer bespoke moulds and paver set up configurations to suit any application.

Insitu drainage systems are typically constructed prior to adjacent carriageway surfacing on top of a sub base foundation with the depth of the insitu product being equal to the depth of pavement.

Insitu drainage details can though be constructed against fully or partially constructed pavement.

Typically a 35N concrete is proposed although higher strength mixes are available if required.

Open Water Channels

A popular system with many profile variations.

In the UK invert gradients of up to 22% have been tested to ensure that errant vehicles are not destabilised should they cross the channel.

In the case of a direct replacement of a pre-cast system both the element and the bedding are constructed monolithically. The insitu mass does not require backing concrete.
Insitu Concrete Drainage Systems

Outfalls can be constructed in a number of ways including on line and offline details. Outfalls can include silt traps if required and connection to primary carrier drain is simply achieved using standard construction techniques.

Maintenance is simple with any debris easily collected from the drain by suction sweepers.

The bore is created by slipforming over an inflated void former that once initial set is achieved is removed.

Outfalls can include silt traps and are constructed using modular formwork, plastic connectors and rising sections so that integrity of the drain is maintained.

Kerbs

Precast kerbs can be successfully replaced with insitu concrete alternatives given sufficient length and relative continuity of work.

Precast profiles can be identically matched with the insitu profile including bedding concrete.

The monolithic product is far more durable than individual elements supported by a low strength concrete backing.

Tapers and driveways can be easily accommodated with specially designed paving moulds featuring hydraulic blockouts.

Radii are easily achieved even as small as 6m.

The high productivity that is realised by the slipform process means that attention must be paid to programme and availability of works.

Slot Drains

Slot drain provide a large capacity carrier drain integral within a section of minimal footprint.

Surface water accesses the drain via a continuous longitudinal slot.

The overall size of the section is directly proportional to the diameter of the carrier drain bore.

Extrudakerb have developed a range of slot drain profiles varying from a 150mm to 500mm diameter bore.