

## P-NC-02: Littlemoor Drain / Station Road / Finkle Street / North Cave Beck

This is an interesting sub-catchment which has been subject to surface water flooding since 2007. Land to the east drains into Littlemoor Drain and other land drains. This has consequently flooded properties on Everthorpe Lane, Station Road, North Cave Primary School, Finkle Street and contributed to flooding on Westgate and Blanshards Lane.

On the aerial plan, culverts are marked in purple. Littlemoor Drain is intended to flow north in culvert under Finkle Street and Blanshards Lane to NC Beck. There is a relief culvert running west from Finkle Street to NC Beck, understood to be 400mm dia, installed pre-2007. This does not appear to have the capacity to prevent flooding.

When North Cave Beck is full, water from Littlemoor Drain (culvert) cannot exit north or west into the Beck, backing up and flooding Finkle Street, Westgate and Blanshards Lane.

Looking at the whole sub-catchment, storm water could be held in re-designed land drains (land ownership is partially highways and private) to the east, to relieve Everthorpe Lane / Station Road / NC School.

Storm water which passes under the school building and playing field could be intercepted and directed west towards NC Beck, avoiding the built-up areas which are currently amongst the worst-affected by flooding in North Cave.

On the plus side, the land use is mostly pasture or horse grazing, so there is potential not just for conveyance, but also for attenuation, in consideration of downstream properties. In fact, water might usefully be collected. It is likely that the land use would not be detrimentally affected by temporary attenuation, although this would have to be discussed on a case-by-case basis.

On the minus side, there are multiple landowners to negotiate with, and a need to navigate a slight rise west of the school, resulting in a deep ditch or culvert, before reaching the shallow slope west towards the Beck.

