



Environment
Agency



Trackway options

Trackway options available

Item Code	Description	Indicative Item Cost
NFM10	Cross drains	£490

Objective: Cross drains intercept surface water flow paths, helping conduct water away from tracks and other assets. The drains will also help reduce the risk of sediment and other pollutants entering the watercourse.

Specification:

- Cross drains should be positioned at intervals across sloping tracks. They should divert water flowing from uphill areas into specifically created temporary water holding areas.
- The number of cross drains required on a track will depend on the steepness of the slope.
- The distance between cross drains will need to be considered on a case-by-case basis. The cross drains must be capable of collecting heavy flows of water.

Two methods of constructing the cross drain:

- Open Channel Construction:
 - Excavate channel across the whole width of the track. The channel should be at least 100 mm deep and between 100 mm and 250 mm wide.
 - The channel should be lined with concrete with a gridded top which is at least 150 mm wide.
- Raised Hump Construction:
 - Excavate a foundation trench across the whole width of the track to a depth of at least 300mm.
 - Fill trench with concrete.
 - Install kerbstone across the trench, ensuring they project 60mm to 100mm above the surrounding surface.

The temporary water holding area located at the outfall of the cross drains should allow water to infiltrate into the ground, slowing the flow of water reaching the watercourse. By allowing water to settle and infiltrate, the temporary water storage area will also help reduce water quality issues.

- Sediment and other material which may clog the drains should be removed from the cross drain and the outfall area.
- Relevant British Standards must be followed when constructing cross drains.

To prevent the cross drain causing damage, the applicant must ensure that the outflow from the cross drain does not flow into areas of biological, historical or archaeological value. Polluted water should not be allowed to convey via the cross drains into watercourses or ponds.



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Please see page **9** of the following guide for further information:

https://www.yorkshiredales.org.uk/_data/assets/pdf_file/0003/1010991/11301_flood_management_guide_WEBx.pdf