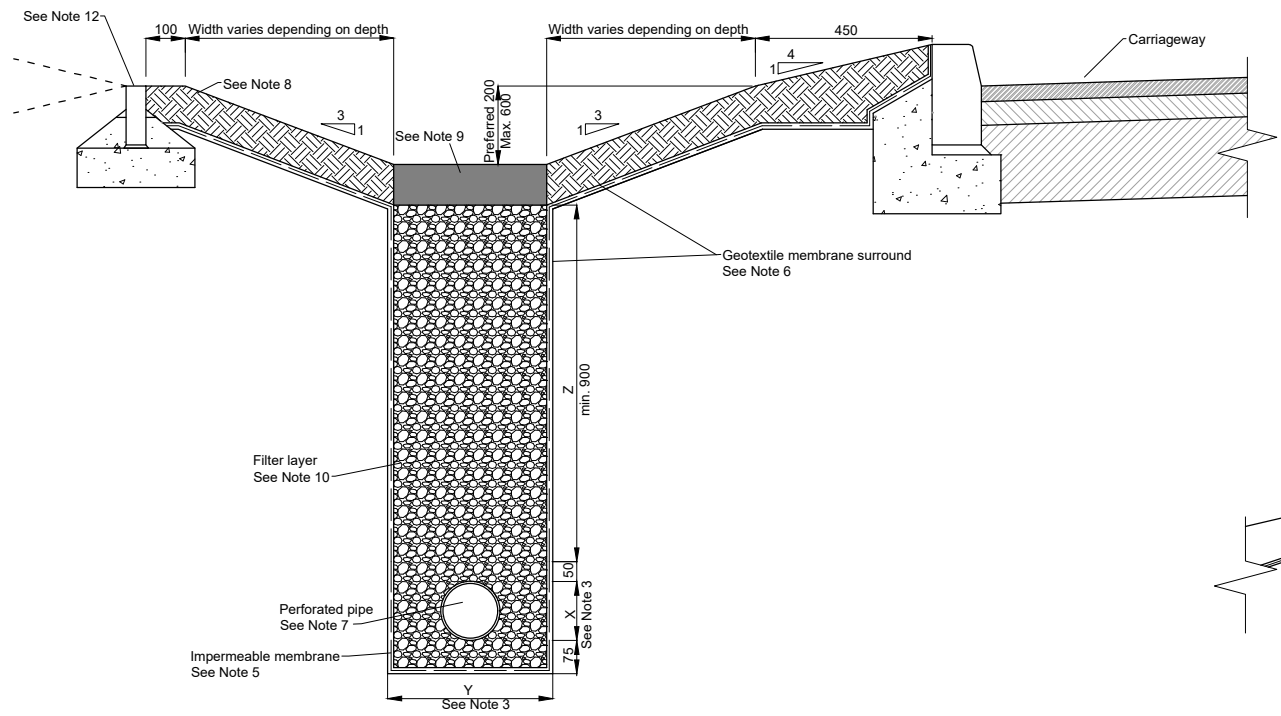
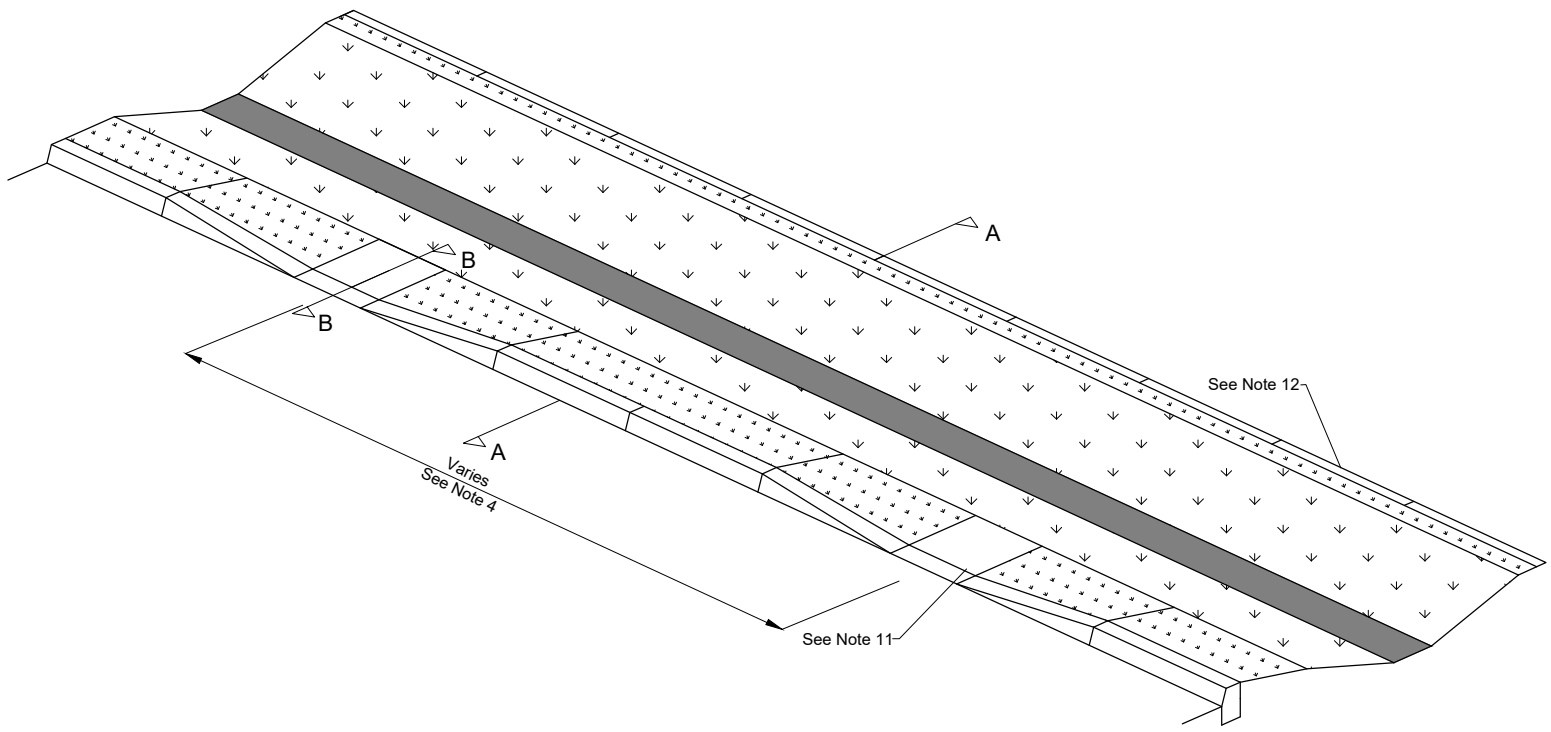
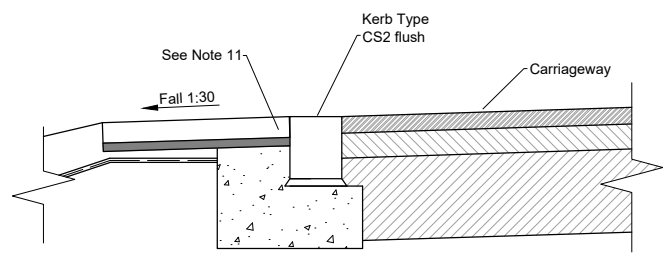


- Notes**
- © Crown Copyright and database rights 2023 AC0000849432
- All dimensions in millimetres unless otherwise stated.
 - The specification referred to in this drawing is the Specification for Highway Works (SHW) published by T.S.O. (The Stationery Office).
 - The dimensions shown are for a standard swale but may be varied to suit individual shapes of watercourse. Dimension X is the external diameter of the pipe. Dimension Z is the cover below finished surface level. Minimum trench width Y=X+300 for drains not exceeding 1.5m cover below finished surface Y=X+450 for drains exceeding 1.5m cover below surface finished level.
 - Spacing to be determined from the requirements of the *Design Manual for Roads and Bridges, CD 521 Hydraulic design of road edge surface water channels and outlets*.
 - Impervious membrane in accordance to SHW CI 609 and BS EN 13251. Each side of the waterproof geotextile membrane shall be protected by a layer of non-woven geotextile. The geotextile shall sustain a tensile load of not less than 5.0kN/m at break and have a minimum failure strain of 10% when determined in accordance with BS EN ISO 10319, and have a minimum static puncture resistance of 1200N when determined in accordance with BS EN ISO 12236, in accordance to SHW CI 514.4. The pore size distribution (090) of the geotextile shall be 100 microns. The permeability of the geotextile shall be above 30 litres/m²/sec, to the test method described in SHW CI 514.4(v).
 - Terram 1000 (or equal approved) geotextile membrane surround. Staple Fibre Needle Punched and Thermally Bonded Nonwoven Geotextiles to BS 8661. All Geotextiles to be in accordance with SHW CI 609.
 - Twin wall perforated PVC pipe 110, 150 or 225mm internal diameter to SHW CI 518.
 - 100mm thick Class 5A or 5B Topsoil to SHW CI 618. Base and side slopes to be prepared and planted in accordance to SHW Series 3000: Landscape and Ecology.
 - 100mm thick sandy root zone material.
 - Type B filter material to SHW CI 505.8(ii) and Table 5/5.
 - 450 x 450mm concrete slab to control erosion to BS EN 1344 Clay and calcium silicate pavers for flexible pavements, laid on a 10mm Class 1 (3:1) sand/cement mortar bed to SHW CI 2402.
 - Limit kerb is a demarcation feature and will not always be present.



Section A-A



Section B-B

Revision Details	Drawn by	Checked by	Check Date	Surf.



Project: Standard details. Series 0500: Drainage and service ducts

Title: Standard road drainage dry swale

Scale (at A4): Not to scale

Drawn: JC Date: 03/2024

Checked: CHK Date: 04/2024

Drawing No: SD/0500/10 Rev: 1