

1. This drawing is to be read in conjunction with the standard details, the layouts drawings and specifications for the development.
2. A +1% gradient represents a rise of 1m in 100m.
3. Left and right hand channels are on the left and right hand side respectively, when standing at zero chainage and looking along the road.
4. A level at any point 'X' m from the start of a vertical curve is given by the formula:-

$$\text{level@'X' level@ start of curve} + \frac{ax}{1000} - \frac{(a-b)^2 x^2}{200L}$$
 where 'a' and 'b' are the gradients at the start and end of the curve respectively and having the algebraic signs +/-.
5. Pipe sizes are stated in millimetres and levels are shown in metres A.O.D.
6. All pipes to have flexible joints with granular bedding (class 5) unless stated otherwise, where 150mm concrete bed and surround is specified the concrete must be located at the joint positions by the insertion of a 'flexcoll' collar.
7. Connections to existing sewers are to be soffit to soffit unless noted otherwise.
8. All vitrified CI/As to be extra strength to B.S. 65. 1991.
9. 'WV' is equal to the rate of change of gradient and is calculated from the formula:-

$$MV = 100 \times \frac{(A - B)}{L}$$
 Where A and B are as in note 4 above.
10. Existing levels to be confirmed on site prior to commencement of works.
11. All CONCS to be class 'M'.
12. Refer to Betts Associates drainage layout drawing WA/25-1001 for further drainage notes.
13. All adoptable drainage is to be designed and constructed in accordance with Standard Design and Construction Guidance - Appendix C and Utilities Utilities standard details.

Existing Ground Level
Proposed Ground Level
30 Year Water level

Details on this drawing are subject to technical approvals

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