



### DESIGN

Minimum grade of 1 in 100 & minimum cover of 1.2m below kerb level. For pipe lines larger than 150mm $\varnothing$  utilising vitrified clay or concrete, with belled joints, the void between the pipe and drilled hole is to be concrete grouted.

### ACCEPTANCE

No undervertical in pipe, maximum 1/2 pipe oververtical provided no ponding in the line. If not within the specified tolerance the pipe may have to be reconstructed by normal trenching techniques requiring an open excavation permit.

When direct drilled into existing manhole, all debris to be caught and removed.

If the drill hole exceeds the pipe outside diameter by more than 25mm it shall be concrete grouted.

### MATERIAL

All pipe materials and connections are to comply with the approved standards. For stormwater thrusting purposes, solvent cement jointed PVC pipes complying with the following standard diameter wall thickness maybe used.

Normal size (ID)	Diamter (OD)	Wall thickness
225mm	250mm	8.9mm
300mm	315mm	11.2mm
375mm	400mm	14.2mm



DETAIL:

## HORIZONTAL DRILLING OF PIPES

Engineering  
Quality  
Standards

DETAIL No:

D12

**MANUKAU CITY COUNCIL**

UPDATED:

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