



2. 450mm CHAMBER IN ROAD

3. 250mm CHAMBER IN GARDENS

6. Drain under road with less than 900mm cover

7. Drain under road with more than 900mm cover

4. Shallow drain in garden with less than 600mm cover

5. Drains under ground bearing floor slab

110mm PVCu to 40 or 32mm pipe 110mm PVCu to 50mm pipe

8. 32, 40 & 50mm connections to 110mm dia pipe.

Shallow drains: See details.

Pipes laid at depths less than 600mm and which are not under a road should, where necessary, be protected against damage by placing over them a layer of concrete, paving slabs or similar. A minimum 75mm cushioning layer of granular material must be laid between pipes and the slabs or concrete.

The flexible nature of PVCu pipes enables them to accommodate ground movement and other differential settlement that may occur under normal conditions. Therefore, the use of concrete bed and surround is not recommended and only under special circumstances, at very shallow cover depths or where it is necessary to safeguard foundations, should it be used. Where the use of concrete bed and surround is unavoidable, it is recommended that pipes are laid in 3 metre lengths and a compressible board is shaped to fit around each joint. Pipes should also be wrapped with polythene to prevent the ingress of cement slurry into ring seal joints.

Drains under floors:

Drains often have to be laid under buildings in order to connect sanitary pipework which has been positioned some distance from the outer walls. Where this occurs, deep hardcore within the foundation boundaries should be compacted first. The trench for the pipe should then be excavated and suitable material employed for the bedding and backfilling operation. If trenches are dug from original ground, pipes may be laid and surrounded as necessary before the top layer of hardcore is formed. Where a pipe passes through a wall or foundation of a building, a lintel or sleeve should be built in to provide clearance around the pipe.

Drains under roads:

If the depth of cover under a road or driveway is less than 0.9m, a concrete slab spanning the trench width is required.

[illegible]

Land South 70 Main Road,
Quadring, PE11 4PW

Proposed development: 5 houses

Drainage Plan

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