



CHAPTER 5

SITE PRELIMINARIES



Site Research

Desk Study

- Survey maps
- Historical documents
- Heritage documents
- Planning records
- Environmental documents

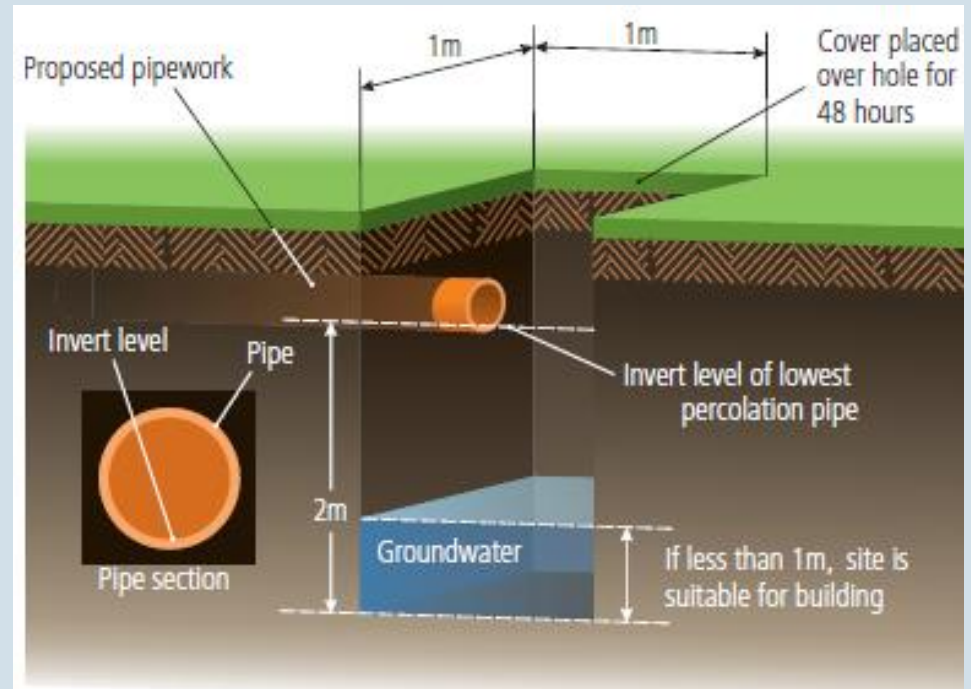
Field Study

- Local knowledge
- On-site investigation



Soil Investigation

- Soil density
- Soil type examples
 - Limestone
 - Sandstone
 - Shale
 - Clay
 - Slate
- Trial hole



Soil Types

| Category of soil | Types of subsoil | Bearing capacity | Description |
|------------------|------------------|--------------------------|--|
| 1. Sand | Compacted sand | >600kN/m ² | Hard to work. Must be excavated with a pick. |
| | Compacted gravel | >300kN/m ² | |
| 2. Gravel | Loose gravel | >200kN/m ² | Easy to work. Can be excavated with a spade. |
| | Loose sand | >100kN/m ² | |
| 3. Clay | Hard clay | 300–600kN/m ² | Pick needed for excavation – cannot be moulded by hand. |
| | Stiff sand/clay | 150–300kN/m ² | |
| & | Firm clay | 75–150kN/m ² | Can be excavated with a spade and moulded with fingers under substantial pressure. |
| | Soft clay | 75kN/m ² | Easily excavated and easily moulded by hand. |
| | Soft silt/clay | | |
| Soft sand/clay | | | |
| 4. Silt | Very soft clay | 75kN/m ² | When squeezed, this soil will ooze from between the fingers. |
| | Very soft silt | | |
| 5. Peat | Soft/firm | <75kN/m ² | Not suitable to build on. |



Percolation Test



Other Considerations

- Layout and landscaping
- Site entrance
- Boundary treatments

