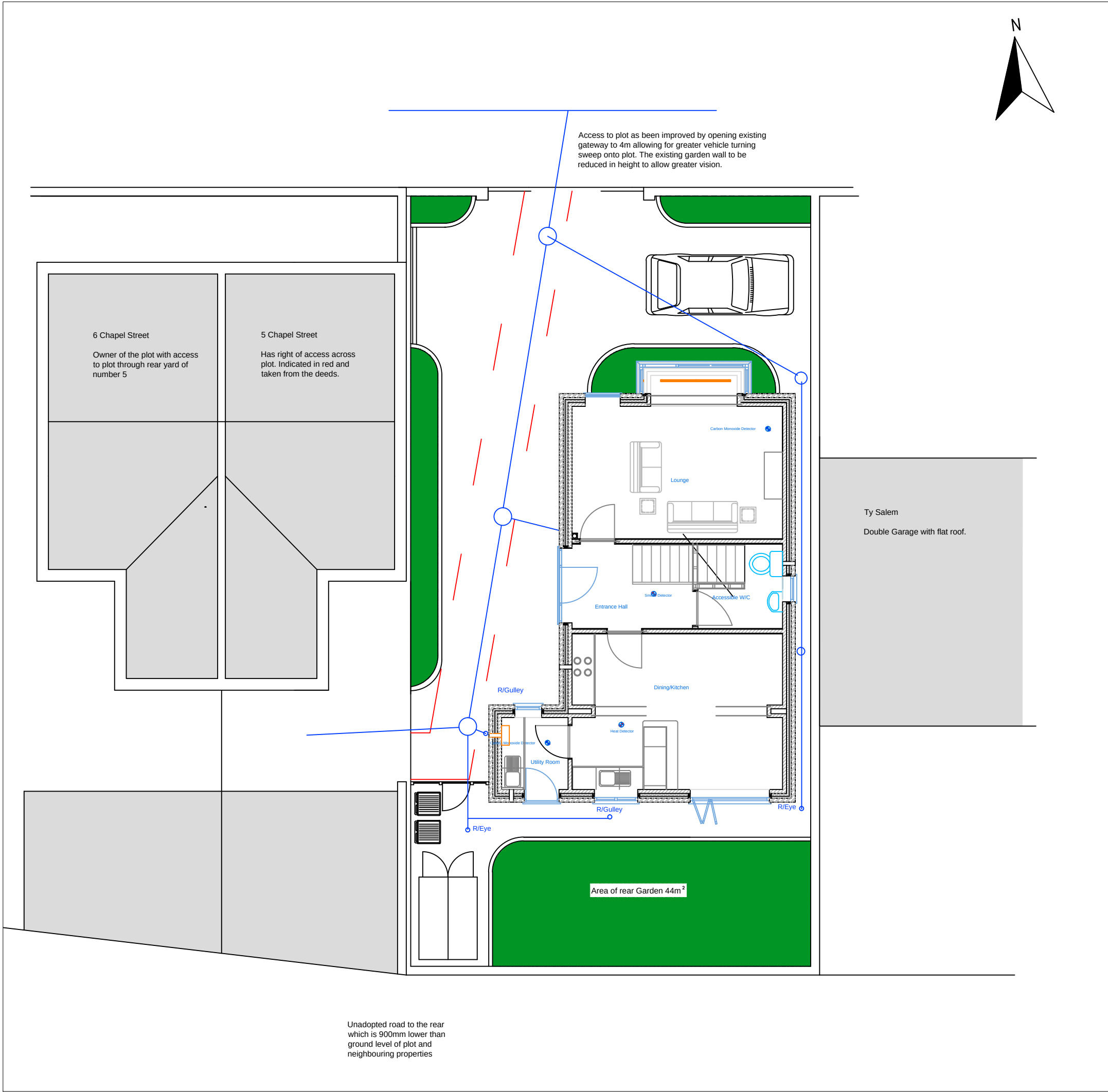




Drainage (Cont)

Flexible pipes (i.e. plastic) are to be laid minimum 600mm below finished ground level, under garden/pedestrian areas and 900mm below finished ground level under driveway or any areas accessible to heavy equipment or vehicles. Pipe to be bedded on 100mm granular material and filled up with the same to the level of the top of the pipe. Immediately above the pipe there should be 100mm of selected fill or granular fill free from stones larger than 40mm and then 200mm of selected fill free from stones larger than 40mm. lumps of clay over 100mm, timber, frozen material or vegetable matter.

Where pipes are laid at shallower depths than those described above, protect pipe with reinforced concrete cover (paving slabs are sufficient under garden areas) on a flexible filler over the top of the granular material fill. Concrete cover to bear on original ground 300mm wider than the drain trench to each side. Minimum 75mm granular fill between underside of flexible filler and top of pipe

Where the invert of the drain is between 600mm and 1200mm down a min. 450 x 450mm or 450mm dia. inspection chamber of vitrified clay or plastic is to be used. Below 1200mm down the same inspection chamber size can be used but with a maximum 300mm x 300mm or 350mm diameter access cover to deter entry. (Above 600mm depth, min. dia. for circular inspection chamber is 190mm). For a manhole between 1500mm and 3000mm deep to the soffit of the pipe, to be constructed of min. internal dimensions of 1200mm x 1000mm as follows:- 150mm concrete base. 225mm Class B engineering brick walls with water tight joints. The gradient of the haunching is to be 1:6. The benching is to be 1:1 cement mortar and bedding in grade A concrete. Provide fixed ladder or steps as necessary leaving min. 900mm clear to opposite side of manhole.

|              |                                                             |
|--------------|-------------------------------------------------------------|
| Drawing:     | Site Plan                                                   |
| Works:       | New Dwelling                                                |
| Client:      | Mr A Price                                                  |
| Address:     | Land adjacent to<br>5 Chapel Street<br>Pen-y-cae<br>Wrexham |
| Scale: 1:100 | Drawing No: 15-03-02B                                       |