

*The Fields, Spring 2000.*

## **Beneath our feet**

Some people may have wondered at the green 'Tardis' situated on the Kidneys near the allotments.

Far from being the gateway to other worlds, this structure provides access to the sewer system!

The trunk sewer was a major engineering project carried out during 1980/81 at a cost of £2.8 million. The original brick trunk sewer constructed in the 1870s could no longer cope. It was constructed by tunnelling through the solid Oxford clay at a depth of around 12 m (40 feet).

The sewer is very big – 2.54 m (8' 4") diameter. During construction a narrow gauge railway ran through the pipe taking a train which carried the labourers to and from the workplace and pulled trucks to remove the clay spoil.

I knew one of the engineers engaged on the project, and when it was nearing completion I made a subterranean journey. We embarked at the pumping station in Littlemore. Our 2 mile trip took us beneath Iffley Meadows and Donnington Bridge Road; we travelled parallel with Meadow Lane beneath the allotments, the Kidneys, Isis School grounds and the recreation ground; under the rugby and athletics tracks, and beneath the Cherwell almost to the point in Christchurch Meadows (between the New Walk and St Aldates) where it connects to other sewers. We watched the tunnelling machine cutting through the shiny blue clay and the concrete segments that made up the silver lining being put into place.

Apart from some access shafts, the tunnelling technique avoided any disturbance of the surface and so was a very environmentally friendly method. Back in 1972 an advance section of the sewer had been laid using traditional trenching for the length of the Isis School site in anticipation of the building of the new school. During a lengthy construction period the trench had to be pumped out non-stop, day and night, into the drainage dyke bordering the Kidneys. This operation was extremely noisy and damaging and fortunately was rejected in favour of tunnelling. This length of sewer was abandoned and remains underground adjacent to Meadow Lane, no doubt permanently full of groundwater.

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