

PROJECT: Water Distribution, London **Use of Dorot 30-6-PR (HyMod) solution**

Project objective

To reintroduce appropriate pressure management to this water supply zone.

The challenge

The existing flow meter and old PRV (**figure 1**) were surveyed for possible service and re-use. The valve was seized, again putting it beyond economic repair.



Figure 1

The solution

1. Replace seized GA PRV with new 150mm (6") diaphragm type PRV
2. Pressure logging has identified a possible 20-25 m reduction in pressure with some form of modulation at night
3. A 150mm Dorot PRV was purchased mated to a Fluid Controls hydraulic modulator with high pressure limitation pilot rail (**figure 2**).

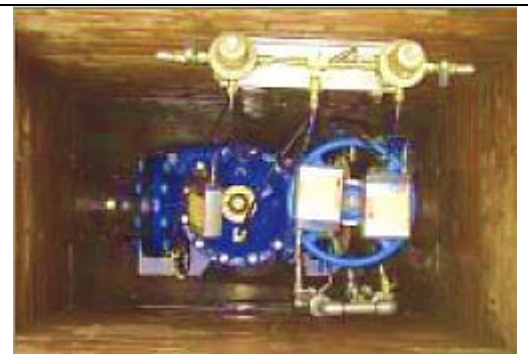
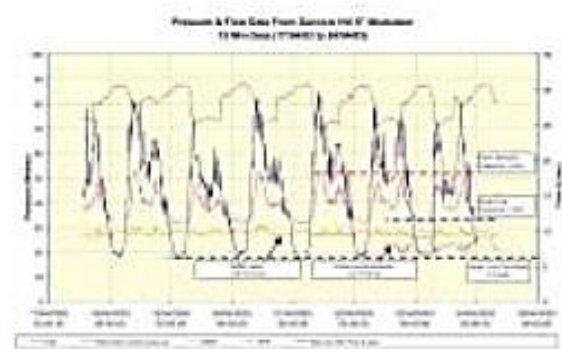
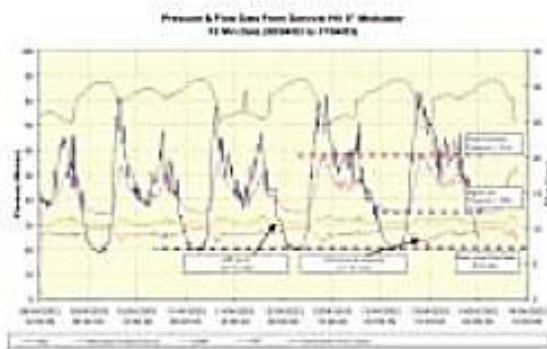


Figure 2

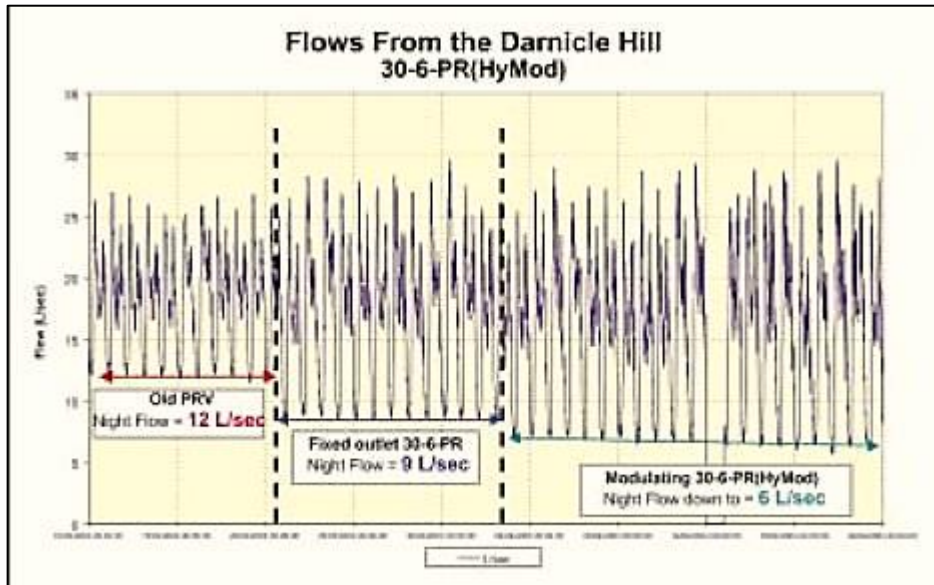
Results

As demonstrated in the charts below and in the next page: The volumetric reduction is 0.23 Mld (million litres per day).

Graph 1 - Pressure and Flow results illustrating post-commissioning of PRV and modulator.



Graph 2 - Flow results illustrating the drop in night flow (pressure reduction during low demand hours) and improvement in supply during high demand hours (achieved as a result of the low PRV losses)



Graph 3 - Daily Flow results illustrating volumetric saving.

