Investment Information

Balfour Beatty Civil Engineering JACOBS

NetworkRail

# What's happening?

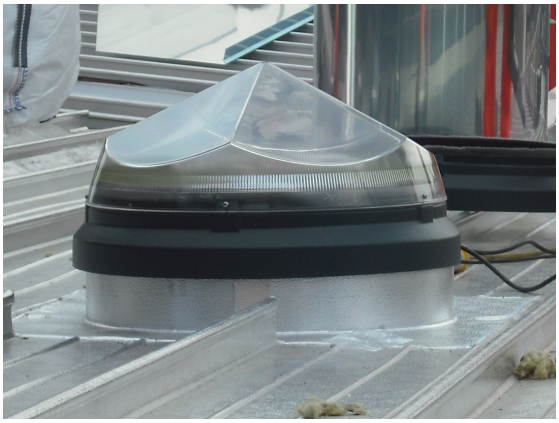
# Best practice at *Blackfriars*

## *Overview:*

Under the Thameslink Programme significant improvements are being made at Blackfriars to both the Thameslink and London Underground Stations. These are due to be complete by spring 2012.

Under the Climate Change Act 2008 targets for tackling climate change by reducing energy consumption and Carbon Dioxide emissions have been set. One way of trying to reduce these is the climate change levy. This levy will increase the cost of electricity by 0.43p per kWh and depending on Tariffs may increase the cost of electricity by up to 20%.

Understanding these objectives and implications while designing the FCC employees area in the North Station, Jacobs, looked into using a system that could harness natural daylight. The *Monodraught* SunPipe system was judged to be the best method for the south facing roof. It is energy free, and uses a reflective tube to pipe daylight from the rooftop into the living/working area to brighten areas where daylight from windows cannot reach.



## *Benefits of SunPipes:*

- Reduce energy usage by eliminating the need to use electric lighting during daylight hours. At least **75%** of electricity costs can be saved during the daytime.
- Offer considerable environmental and health benefits by creating better indoor conditions such as a natural light environment. Working under natural daylight has shown to reduce stress and illness by providing a soothing and calming effect.
- Reduces the need for cooling the area due to heat from the electric lighting.
- Eliminates the need for maintenance associated with replacing light bulbs

## *Meeting our objectives & targets:*

- Network Rail's Sustainable Design and Construction Strategy - *Restrict Carbon Emissions*
- CEEQUAL – Evidence of the project considering energy usage during operation

---

***Date: May 2011***
***For further information contact Simon.Edwards@Networkrail.co.uk TLP Consents Manager***