

City Hospital, Nottingham, UK

Fibrelite Covers And KPS Piping Provide Long Term Retrofit Solution For Nottingham City Hospital's Backup Generator Supply Lines



Hilton Bodill Construction specified Fibrelite covers and KPS piping for Nottingham City Hospital refurbishment

Project Overview

Hilton Bodill Construction contacted Fibrelite on behalf of their client, Nottingham City Hospital, who required a lightweight and strong modular covering system for their newly re-routed service trench, which replaced the traditional heavy concrete slabs. These protect and provide access to the hospital's backup diesel generators supply pipes (diesel and oxygen). An easy-install, corrosion-free replacement for their previously existing steel piping was also required.



Quick access to piping is vital for maintenance and inspection



Fibrelite covers are corrosion-resistant, unaffected by water, underground gasses and most chemicals



Apertures were required in some covers to accommodate pipework connecting from within the trench to above ground networks

Problem

The previously existing concrete trench access covers were heavy, requiring specialist lifting equipment to remove and replace them: a time consuming and expensive process. Due to their weight, they also posed a risk of injury to maintenance teams (quick access to the piping is vital for maintenance and inspection). Nottingham City Hospital also wanted to replace their steel pipework with a reliable plastic piping system, eliminating the potential for corrosion and subsequent fluid egress.

Key issues with the previously existing products:

Concrete Access Covers

- Heavy concrete access covers posed a risk of injury to maintenance teams and required specialist personnel/machinery for removal and replacement
- Concrete covers often fracture and chip over time
- Some covers would need to be modified to accommodate pipework extending from within the trench to above ground networks

Steel Pipework

- Steel pipework can corrode over time, resulting in fluid egress (leaks)
- The traditional steel pipework was heavy and labour intensive to work with



Previously existing concrete access covers were heavy and difficult to remove and replace

Solution

OPW's UK technical team put together a proposal combining lightweight Fibrelite GRP composite trench covers and KPS double wall polyethylene piping, which was accepted by the contractor and end user.

Key Benefits Of Fibrelite Covers For This Project:

- No specialist machinery or personnel required for removal and replacement
- Strength-to-weight ratio. All trench covers can be safely removed manually by two people while strong enough to withstand sustained loading
- Bespoke aluminium frame section supplied by Fibrelite to fit existing rebate – ensuring minimal upheaval to site works
- Bespoke Fibrelite covers modified to include apertures accommodating pipework extending from within the trench to above ground networks
- Fibrelite covers are corrosion-resistant – unaffected by water, underground gasses and most chemicals



All trench covers can be safely removed manually by two people while strong enough to withstand sustained loading

Key Benefits Of KPS Piping For This Project:

- Engineered for easy installation. Compact, installer friendly KPS fittings weld both walls of a double wall pipe simultaneously
- In house and onsite installation training provided (standard for clients new to the KPS piping system)
- Lightweight
- Corrosion free polyethylene piping
- Zero permeation (liquid/watertight)



KPS' plastic piping provide a safe, easy-install fluid transfer solution



Fibrelite covers eliminate the need for specialist personnel or lifting machinery during maintenance or operation

For more information on the KPS product range please contact us:

Email: info@kpsiping.com

Web: kpsiping.com

Results

The easy access solution provided by Fibrelite trench covers eliminates the need for any specialist personnel or machinery during maintenance or operation, while KPS piping provides a compact, long-term fluid transfer solution (trusted by oil companies around the globe).

Fibrelite And KPS Benefits At A Glance:

- Easy manual access to trench services using the ergonomically designed Fibrelite FL7 lifting handles
- Best access cover strength to weight ratio available in the market today
- Bespoke, made-to-measure
- A long-term solution
- Fast, simple piping installation
- Local technical support



Fibrelite composite trench covers can be manually removed by two people using Fibrelite's FL7 lifting handles (as seen in the above image on another site)