

# What's happening?

## Re-using Oil Rig Materials at Bedford Station



### Overview:

As part of the capacity increase of the Thameslink route the platforms at Bedford Station have been extended in order to accommodate 12 carriage trains.

To accommodate soil and water table conditions the Bedford project team decided to incorporate re-used hollow steel piles that were originally made for the oil industry into the construction of the platform foundations, as well as gantry, OLE and signal bases.

All platform and 339mm piles were re-cycled oil rig pipes, re-claimed from Aberdeen via Aspins contractors ltd, on behalf of Carillion. Approximately 40 6-7 metre piles were used.

### Benefits:

- Avoided the use of about 135 cubic metres / ~320 tonnes of concrete for the platform foundations alone
- Depending on the concrete mix this would equate to ~39 tonnes of embodied CO<sub>2</sub> <sup>(1)</sup>
- Cost implications of this design are not available at this time due to commercial sensitivity.

### Meeting our objectives & targets:

This initiative meets the following objectives from the TLP Sustainable Design and Construction Strategy:

- Restricting carbon emissions: these have been avoided from new concrete manufacture
- Using sustainable materials in a sustainable way: aiming for at least 25% of total material value from reused and recycled content in new construction.
- Minimising the use of new aggregate



<sup>1</sup> <http://www.ukcsma.co.uk/sustainability.html>