## The bridges

Three bridges, Groynes Drive Overpass, Dickeys Road Overpass and the Northern On-ramp Overpass, have been constructed to take Western Belfast Bypass traffic up and over local roads.

While they look impressive, a lot of the work that went into these bridges is underground, hidden from view. Before the project team could start building they had to carry out ground improvement work, constructing around 2,400 columns of gravel and stone into the ground to make it denser.

This reduces the effects of liquefaction and ensures the bridge embankments remain stable, preventing damage to the bridge structures during an earthquake.

In addition, a total of 95 900mm diameter piles support the bridges. The piles are buried around 20 meters below ground level, making these structures a lot more complicated to build!



## Northern On-ramp Overpass

The Northern On-ramp Overpass is the largest of the three structures. It's expected to carry 24,000 vehicles every day at opening, with 9,500 vehicles passing underneath on the new on-ramp. It carries the bypass over the new on-ramp which takes northbound traffic from Main North Road onto the Northern Motorway.

Length 25.2m Width 26.0m Height 9m

Pile Depth 20.5m

**No. Piles and diameter** 35 x 914mm diameter



## Dickeys Road Overpass

The Dickeys Road overpass carries the bypass over Dickeys Road.

Length 18.9m
Width 27.0m
Pile Depth 19.5m
No. Piles andv diameter 30 x 914mm diameter



## Groynes Drive Overpass

The Groynes Drive Overpass carries the bypass over Groynes Drive.

**Length** 17.6m **Width** 26.0m

Pile Depth 19.0m

**No. Piles and diameter** 30 x 914mm diameter



