

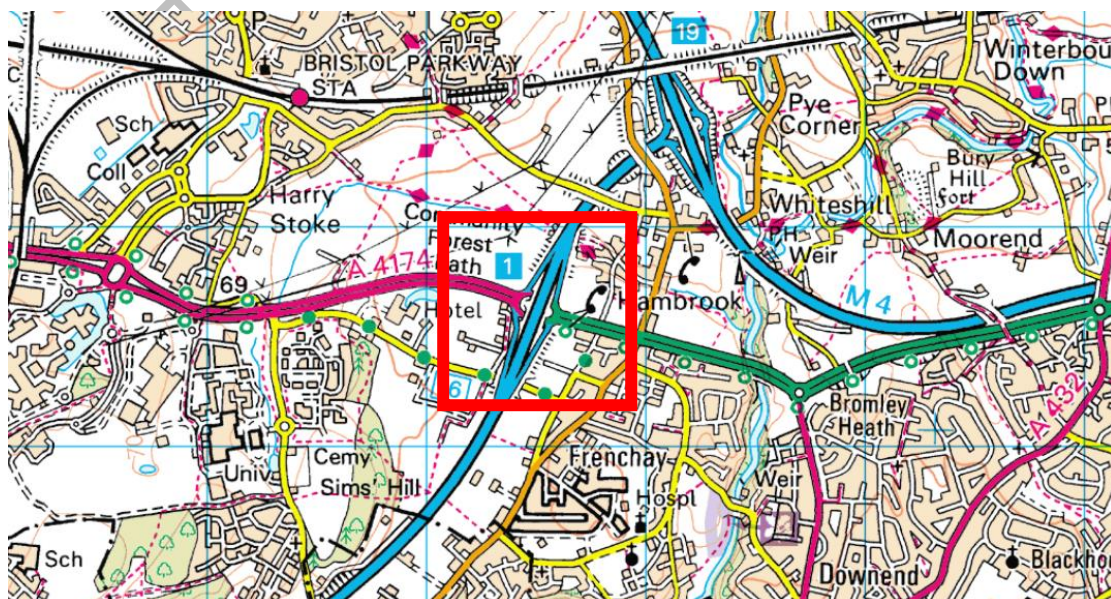
**National Asset Delivery
Technical Surveys and Testing**

**Site Information for
570129 Duct Survey
M32 - J1**

1 SITE INFORMATION

1.1 Site boundary, extents and access arrangements

- 1.1.1 The M32 Junction 1 is a grade separated junction comprising of a circulating underpass embankment connecting the M32 with the A4174. The site includes both the entry and exit of the South and Northbound Slip Roads and the Circulatory.
- 1.1.2 The site is bounded by the highway's boundary, predominantly defined by existing fence lines.
- 1.1.3 The site is to be accessed using the Highways England and South Gloucestershire County Council Estates.



1.2 Pavement

- 1.2.1 The paved areas on site are the slip roads and the junction circulatory.
- 1.2.2 There is a footway adjacent to the A4174 on the Southern side of the circulatory. This also include two signalised crossing points at motorway Southbound entrance and Northbound exit slip roads.

1.3 Drainage

- 1.3.1 There is an existing system of highways drainage located on the site.

1.4 Geotechnical

- 1.4.1 M32 J1 NB Off Slip: Historic Borehole Summary (OSGR E 363385, N178345).
 Borehole ID – ST67NW181
 Borehole data recovered from M32 J0-3 SB MP81-11 Signs Geotechnical Preliminary Sources Study Report by Atkins in 2014.

Borehole Summary	Water
0 – 0.7m MADE GROUND, red brown silty sand and medium gravel of limestone/igneous rock ballast	Water level at 1.4m bgl on completion of drilling
0.7 – 2.0m MADE GROUND, firm red brown clay with little fine and medium gravel size fragments of red brown mudstone and siltstone	
2.0 – 6.1m MADE GROUND firm red brown clay with gravel size fragments of mudstone with occasional fragments of ash	
6.1 – 7.4m MADE GROUND, stiff red brown sandy clay with cobble sized fragments of concrete	
7.4 – 7.7m Firm dark brown very sandy organic clay with little rootlets	
7.7 – 8.0m Recovered as red brown silty SAND with medium gravel size fragments of sandstone	

1.5 Soft Estate and Environment

- 1.5.1 Slip road verges are grassed to provide forward visibility for signage. Extend further back from carriageway scrub vegetation and trees are present.

1.6 Traffic Signs, Road Markings

1.6.1 Signage

- Signage on the slip roads is predominantly blue backing motorway signage which are both illuminated and non-illuminated. Some signage not protected by VRS barrier, are non-passively safe. The Roundabout is signalised with Toucan crossing on the entrance to the Southbound on-slip.
- The Southbound on-slip also has top of ramp signalisation however, does not appear to be in a use.

1.6.2 Road Markings

- Road markings are typical for this road layout, a combination of grade separated junctions and a roundabout.

1.7 Lighting

- 1.7.1 There is existing streetlighting provision throughout the entire scheme extent.

1.8 Structures and Buildings

1.8.1 Overbridges

- Safety precautions should be in place under the M32 bridge's due to limited headroom.

1.9 Tunnels

1.9.1 There are no tunnels in the vicinity of works.

1.10 Technology

1.10.1 There are matrix signs located at the start of both entry slip roads with electrical interface cabinets throughout.

1.11 Statutory Undertakers

1.11.1 The following services are located within the site extents:

- British Telecom
- Virgin Media
- Western Power Distribution
- Bristol Water
- Wessex Water
- Highways England
- South Gloucestershire Council

1.12 Traffic

1.12.1 **Annual traffic reports from Highways England show average daily flow (AADF) and % of commercial vehicles within AADF from 2019.**

- Northbound Exit Slip Road: AADF 13,986
% of commercial vehicles within AADF 4.2%.
- Northbound Entry Slip Road: AADF 18,525
% of commercial vehicles within AADF 9.1%.
- Southbound Exit Slip Road: AADF 17,658
% of commercial vehicles within AADF 10.2%.
- Southbound Entry Slip Road: AADF 13,259
% of commercial vehicles within AADF 5.9%.