

# National Asset Delivery Technical Surveys and Testing

570122 M4 J22-21 Including J22 Eb Entry Slip EB & WB MP 195.6 - 190.4 RS

**Topographical Survey** 

**Site Information** 

## 1 SITE INFORMATION

# 1.1 Site boundary, extents and access arrangements

The site is located on the M4 between Junction 22 and Junction 21. The survey is to be undertaken in both directions, Eastbound and Westbound MP 195/6 – 190/4. It includes two-lanes of a motorway and Eastbound Entry Slip Road. All works are within Highways England's Boundary. Access to the site will be via the Temporary Traffic Management (TTM). The location plan is shown on Figure 1.



Figure 1: Location Plan

The road is subject to minor fretting, minor and major surface deterioration, patch, potholes, rutting, construction joints and open joints. Longitudinal and transverse cracks have also been identified. Within the scheme extents, there are ten following list of structures as stated below:

Structure	Structure Type	Structure Key
M4 Avon Viaduct	Highway Underbridge	26623
Pilning Interchange	Highway Underbridge	13594
Small Culvert C103	Not a Bridge	20352
Redwick Road	Highway Overbridge	13592
The Pill Culvert	Large Culvert	13590
A403 Pilning	Highway Overbridge	13589
New Holm Rhine Culvert	Not a Bridge	34461
B4 – Northwick Road	Highway Overbridge	20351
Bridleway Bw8	Bridleway Overbridge	13587
Holm Lane	Highway Overbridge	13572
Greenditch Street West	Highway Overbridge	13558
Greenditch Street West Culvert	Not a Bridge	34282

For further details, please refer to Scheme Drawings – '187 – J22-21 Including J22 Eb Entry Slip EB MP 195.6 - 190.4 RS and 187 – J22-21 WB MP 195.6 - 190.4 RS Defect & Treatment Plan'.

### 1.2 **Pavement**

This scheme, M4 J22-21 Incl J22 Eb Entry Slip EB & WB MP 195.6 - 190.4 Pavement consists of both: Hot Rolled Asphalt (HRA) and Thin Surface Course System (TSCS) laid back in 1996 and since 2014 respectively. Topographical survey will be carried out along the slip road, carriageway, verges and within the soft verge adjacent to the carriageway both directions. No excavation is anticipated in the Pavement areas.

### 1.3 **Drainage**

There are Highway Drainage Systems present within the scheme extents. For further details, please refer to STATS Drawings attached with Pre-Construction Information Pack (PCIP).

Pre-survey STATS check shall be undertaken prior to Topographical Survey. However, it is anticipated that the survey work will not interface with any drainage apparatus.

1.4 **Geotechnical** 

N/A

1.5 **Soft Estate and Environment** 

N/A

1.6 **Traffic Signs, Road Markings** 

N/A.

1.7 Lighting

N/A

### 1.8 Structures and Buildings

as of the second There are structures within the proposed survey works.

1.9 **Tunnels** 

N/A

1.10 **Technology** 

N/A

# 1.11 Statutory Undertakers

There are Statutory Undertakers within the scheme extents. For further details, please refer to STATS Drawings attached with Pre-Construction Information Pack (PCIP).

As mentioned in Section 1.2, no excavation is anticipated with the Topographical Survey. However, if any excavation is required, the Contractor is to identify existing services using STATS and other techniques before digging. This location should be considered high risk for services due to the volume of services in this areas.

The Contractor is responsible for ensuring a safe survey is undertaken and ensuring no damage to existing services. The Contractor is also responsible for ensuring any damage is reported to the Client and the owner of the asset, including suitable repairs where needed.

# 1.12 Traffic

According to Road Traffic Statistics 2018, this section of the motorway has typical 24hr AADT of between 46991 and 11.0% of HGV.

In order to provide a safe working area, Temporary Traffic Management (TTM) will be provided by the Employer through the Construction Works Framework.