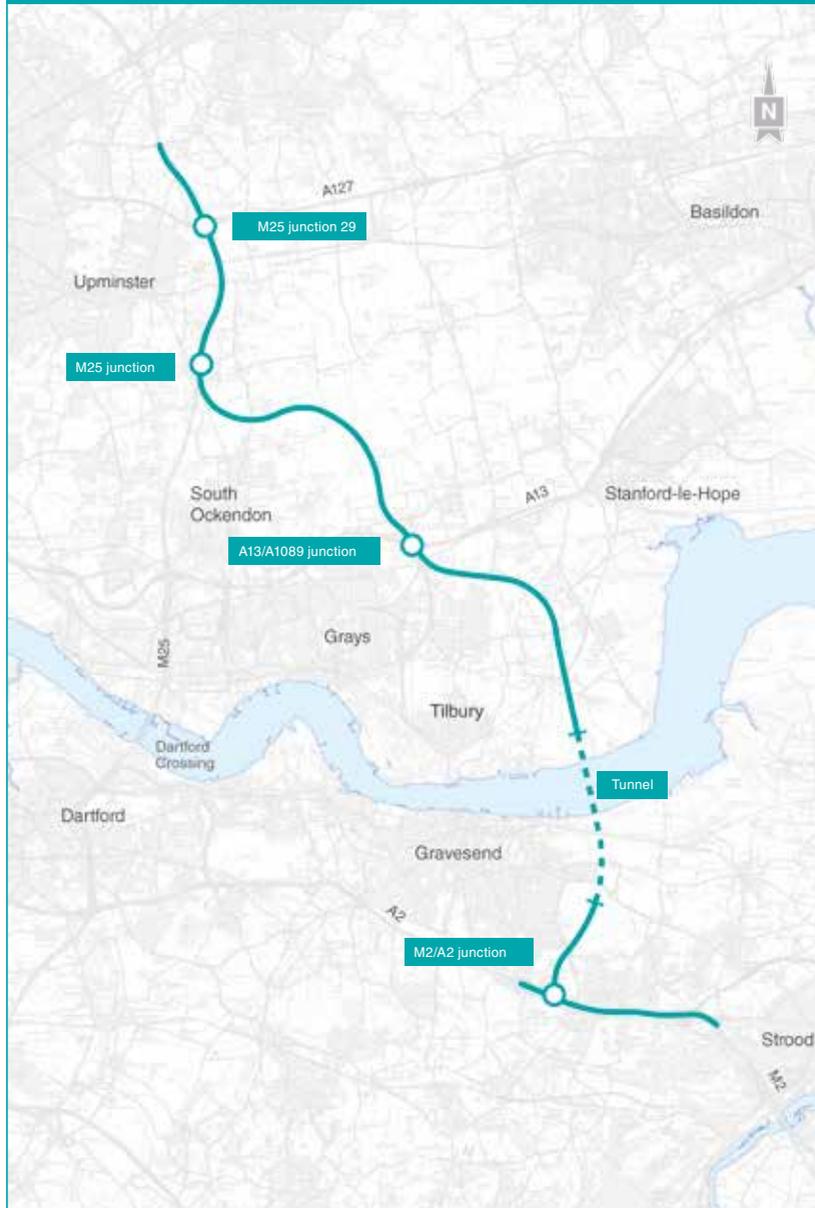


Lower Thames Crossing **Surveys in your area**



Lower Thames Crossing



The Lower Thames Crossing

The most ambitious project of its kind in the country, the crossing is the largest single road investment scheme in the UK since the M25 was completed more than 30 years ago.

The UK's longest road tunnel will be built below the River Thames to connect communities in Kent, Thurrock and Essex.

It will unlock opportunities and economic growth for the region and the country by offering new connections and more

reliable, quicker journeys.

The new road will link the A2 and M2 in Kent with the A13 in Essex and the M25, and will include:

- two 2.6 mile (4.3km) tunnels below the River Thames
- approximately 14.3 miles (23km) of new roads
- new bridges, viaducts and underpasses
- improvements to the M25, A2 and A13



Surveys and Ground Investigations

Highways England is carrying out a programme of surveys and ground investigations under the Thames and across Essex, Thurrock, and Kent, to help us design the Lower Thames Crossing and the way we will build it.

Our survey work is continuing in line with Government policy on COVID-19 that construction activity should continue where it can be undertaken in accordance with the Public Health England and industry guidance. Our teams are following this guidance and we are limiting our works to essential survey and investigation work during this time.

The results of the surveys work will help us to improve our proposals and to develop our application for the Development Consent Order for permission to build the Lower Thames Crossing.

What will you see?

We will be carrying out a number of different types of surveys during the next few months, including ground penetrating radar (GPR), trial trenching for archaeology and utilities, various types of boreholes and assessments of existing structures.

Most of them will have no impact on road users as they will be in rural areas or on private land. At times, we may need to use traffic management or lane closures for the safety of both our staff and road users. When we do this our priority will be to minimise the impact on the local communities.

We will be using several types of machinery that you may be able to see while the works are carried out, including excavators, as well as staff wearing hi-vis clothing.



Ground Penetrating Radar (GPR) Surveys

GPR uses radar pulses to create a profile of what the ground looks like beneath the surface. We will be using both push and mobile GPR techniques.

Mobile GPR uses equipment attached to a van or tractor. This will be used on the roads to carry out the non-invasive surveys. We will carry out the majority of the works using this method.

Archaeological Trial Trenching (ATT) Surveys

Mechanical excavators will be used to dig shallow trenches. We will be excavating the soil to look for archaeological features. We will put up barriers around the trenches and replace the soil once the excavations are completed.

The locations for the trial trenches will mainly be on private farmland on or near the proposed route.



Utilities Trial Trenching (UTT) Surveys

We will dig trial trenches using vacuum excavators or hand dug which will provide us with the most up to date information of the location of existing buried utilities.

The trial trenches will include both work on the road network and off the road network. When we are carrying out works on the carriageway we will need to use traffic management. Barriers will be placed around the trenches and we will replace the soil once the excavations are completed.

Instrumentation and Monitoring (IM) Surveys

Measurements and assessments will be carried out on existing structures such as railway bridges and embankments. IM surveys will use a vehicle with a mobile elevated working platform attached to the rear, so our staff can work safely at height.



Ground Investigation Surveys

Our next phase of ground investigation surveys has begun. The techniques being used are the same as our initial works carried out in our first phase of investigations with cable percussion boreholes being the most common. This involves a 7m tall frame lowering drilling tools up to 60m deep.

To find out more on ground investigation techniques please visit the dedicated page on our website.

www.highwaysengland.co.uk/lower-thames-crossing-ground-investigations/



Walk Over and Geo-Physical Surveys

We are also undertaking several other non-intrusive surveys which include:

Non-Invasive species surveys

Walk over surveys will be carried out by ecologists to identify the location and possible treatment of any invasive species such as Japanese Knotweed.

Unexploded ordnance surveys (UXO)

Unexploded ordnance can be found along the Thames corridor which was used as a guide for German planes during the Second World War.

UXO surveys are non-intrusive and involve using handheld machinery or a detector attached to an all-terrain vehicle which is walked or driven across the area to be surveyed without disturbing the ground. These surveys will enable us to detect any sub surface anomalies such as munitions or bombs that may require further investigation.



This photo was taken prior to Covid-19 social distancing restrictions

Working in the community

Our priority is to carry out this programme of work in a way that will have the smallest possible impact on the nearby community and environment.

The majority of our work will be carried out during normal working hours, between Monday and Friday.

More detail on where and when we're working, and what we're doing can be found on our website:

www.lowerthamescrossing.co.uk

You will also be able to find more detailed information on each technique we'll be using, and the progress of our work so far.

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If you need help accessing this or any other Highways England information, please call **0300 123 5000** and we will help you.

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