



Teddington Direct River Abstraction

# Land, property and tunnelling fact sheet

This fact sheet provides information for people whose land and property might be affected by the project.

To build the tunnel and pipeline for the project, we'd need to purchase land deep beneath some properties. However, there are no plans to compulsorily purchase any residential properties at ground level.

This fact sheet sets out how and why we have identified the land that we might need to build, operate and maintain the project. If you have any questions or concerns please don't hesitate to contact us at **[property.TDRA@thameswater.co.uk](mailto:property.TDRA@thameswater.co.uk)**.



## The land and property needed for the project

The project's draft Order limits show the land that we currently think we'll need to deliver the project. This includes the land we may need temporarily - for example, to carry out construction activities - and the land we may need permanently to accommodate and maintain the new project infrastructure, including new tunnels and pipelines under the ground. They are called 'Order limits' because that is how they would be known in an application for a Development Consent Order (DCO), such as we're planning to submit for this project in summer 2026. For more information on the DCO process, see the consultation brochure at [www.thames-sro.co.uk/tdra/statcon2025](http://www.thames-sro.co.uk/tdra/statcon2025).

Most of the land needed permanently would either be within the existing Mogden Sewage Treatment Works (STW) site or deep underground. Only a relatively small amount of above-ground land outside Mogden STW is needed permanently for the new infrastructure – for example, the proposed intake and outfall structures near Teddington Weir. In addition, we'd need to acquire permanent rights over a small amount of land to allow us and third parties, such as utility companies, to access and maintain any new or diverted assets.

You can view the project's draft Order limits online using our interactive map, or in our map books, all of which can be found at our consultation website at [www.thames-sro.co.uk/tdra/statcon2025](http://www.thames-sro.co.uk/tdra/statcon2025).

At this stage in the project's development, we haven't yet determined the exact alignments for the proposed new tunnel and pipelines that would be needed. For this reason, we've included a wider area in the draft Order limits than we expect to include in our DCO application. Once we've carried out further engagement and ground investigation work, it's likely that we'll be able to narrow the Order limits in many areas. As a result, we expect fewer properties to be included within the Order limits that will ultimately be submitted.

We'll publish our updated Order limits as part of our DCO application and will write to you at that point if your property is included within the DCO Order limits.

## How we've identified the land we may need

As we've developed our proposals for the project, we've used HM Land Registry and desktop research to identify those who own, or have an interest in, the land that is potentially affected.

We've sent out Land Interest Questionnaires (LIQs) to those identified, asking for information about the nature of their interest in the land. The information we're receiving back is helping us to engage with potentially affected people.

If you have received a Section 42 letter (a formal notification) from our Land and Property team, it means land or property that you occupy, or have an interest in, has been identified as potentially being affected by the project in some way.





## Land within the draft Order limits

Owners, occupiers, lessees, tenants and those with rights over land or property within the project's draft Order limits (the proposed project boundaries) are known as having 'Category 1' or 'Category 2' interests, as defined by the Planning Act 2008.

The Planning Act 2008 requires developers of nationally significant infrastructure projects, including TDRA, to identify and consult with people in these categories to ensure they have a fair opportunity to object.

If you've received a letter from us that says that land or property in which you have an interest may be impacted, it is likely to mean that your home is above underground land (subsoil) that might be needed for the proposed tunnel or pipeline that would transfer water to and from the River Thames.

We know that the idea of having a tunnel underneath your home could be worrying, which is why it's important to know that the risk of damage to your property would be extremely low. You can find out more about how we'd manage these risks in the tunnelling section of this fact sheet below.

Our current proposals avoid the need to acquire any residential properties for the construction and operation of the project.

## Category 3 land interests and claims for compensation

The Planning Act 2008 also requires us to identify people with an interest in land outside of the project's draft Order limits who could possibly be affected.

These people are described as having a 'Category 3' interest, meaning that they might be able to claim compensation due to the value of their land interest being affected by the project either during construction or operation. For example, if their property value were affected by noise and vibration during the project's construction.

We've already issued LIQs (see previous page) to those identified as potentially having Category 3 land interests. Our assessment of which properties to include as Category 3 interests is based on the propensity for noise to travel to properties, which varies according to location.

If you have any questions about the information in this fact sheet, please contact us at **[property.TDRA@thameswater.co.uk](mailto:property.TDRA@thameswater.co.uk)**.





## Acquiring land and property for the project

Where we need to buy land beneath homes or property for the tunnel or pipeline, our preference is to do this through agreement. If we can't reach agreement, then we'd use compulsory acquisition powers that we'll seek in our application for Development Consent, under the Planning Act 2008. This would be a last resort, which we'd only pursue once we've used reasonable endeavours to reach agreement.

The Valuation Office Agency has published guidance to help people understand the compulsory purchase compensation framework, at [www.gov.uk/government/publications/the-land-compensation-manual](http://www.gov.uk/government/publications/the-land-compensation-manual).

## Local property prices

We do not expect the project to have any long-term impacts on property prices. For similar projects in Greater London, there can sometimes be a temporary effect on the property market while local estate agents, solicitors and buyers familiarise themselves with the project. If you do have concerns about potential effects, please contact a member of our Land and Property team using the details below.

### Contacting our Land and Property team

If you have an interest in land and property that you think may be impacted by our proposals, and you want to find out more, you can contact our Land and Property team via [property.TDRA@thameswater.co.uk](mailto:property.TDRA@thameswater.co.uk)

## Accessing land for surveys

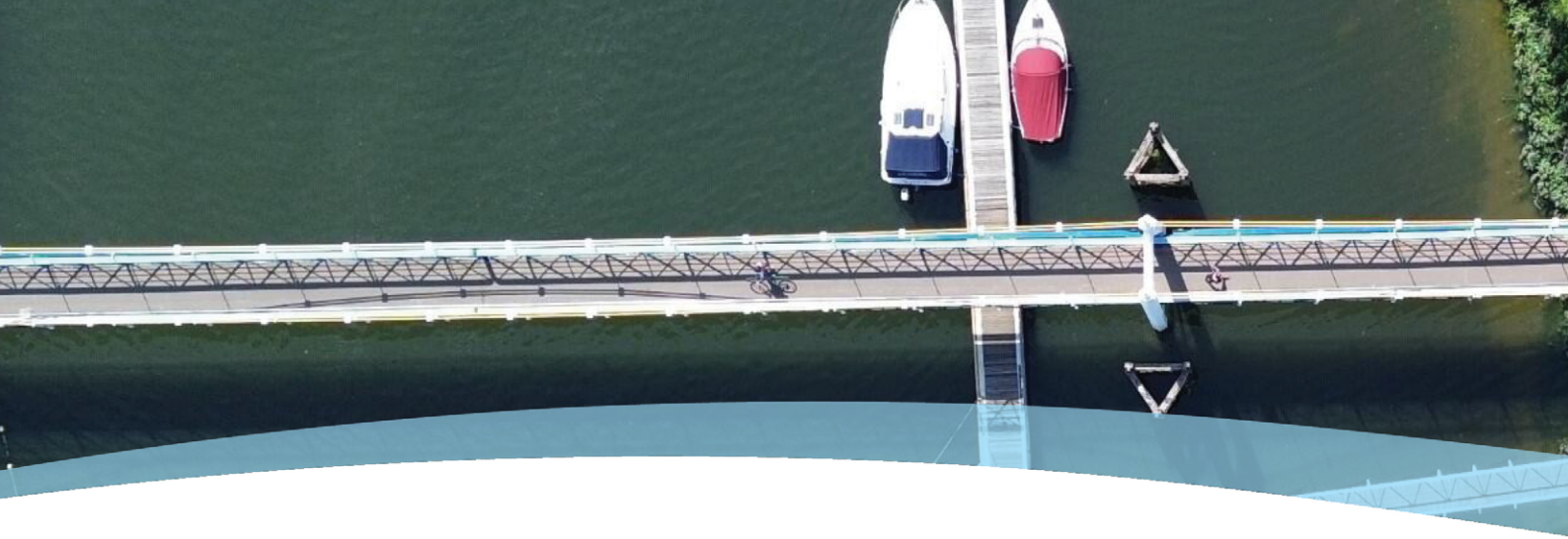
As we continue to develop our designs for the project, we'll need to carry out further surveys and assessments, focusing on local habitats and ecology, waterways, archaeology and ground conditions. These are likely to continue beyond the submission of our DCO application, to inform future construction planning. When we need access to land and property, we'll seek agreement with the people or organisations with an interest in the land. If access can't be agreed, and we can't carry out equivalent surveys on nearby land, then we may seek powers to access land under the Housing and Planning Act 2016, although this is our least-preferred course of action.

## Next steps for landowners and affected parties

We know a project of this size and complexity can cause concerns for those whose land or property is potentially affected. We're committed to making ourselves available to understand concerns and answer questions. For further information, or if you have queries related to land and property, please consider contacting our Land and Property team using the details given below.

Representatives from our Land and Property team are also available at the public information events that we run. You can find more details of these at [www.thames-sro.co.uk/events](http://www.thames-sro.co.uk/events).





## Tunnelling

### Building the recycled water conveyance tunnel

We're proposing to create a new 4.2km-long tunnel from our new water recycling facility, at Mogden STW, to a reception shaft close to the River Thames upstream of Teddington Weir.

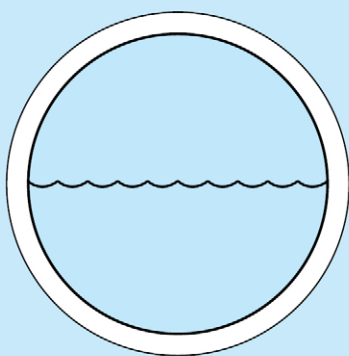
The tunnel would be deep underground – between 20m and 40m in most places – with a 3.5 metre internal diameter, and constructed using a tunnel boring machine (TBM).

Launched from Mogden STW, the TBM would have a rotating cutting-head and be propelled forwards by hydraulic jacks.

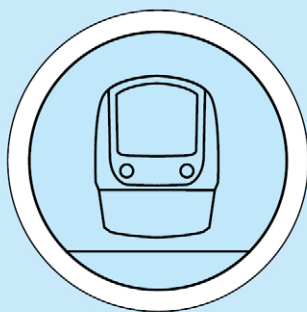
Pre-cast concrete segments would be installed by the TBM as it progresses, to line and brace the new tunnel walls, with excavated material being transferred back down the tunnel for removal at Mogden STW.

TBM's are very good at limiting disturbance to the surrounding ground, making them particularly suitable for tunnelling in urban environments, avoiding ground movements and impacts on land and property on the surface. TBM's have been used successfully across Greater London, such as on the Elizabeth Line, the Thames Tideway project and the Northern Line Extension.

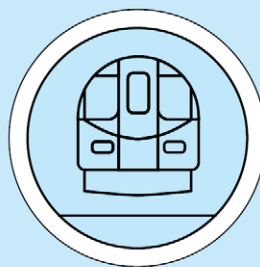
### Recent major tunnelling projects in London



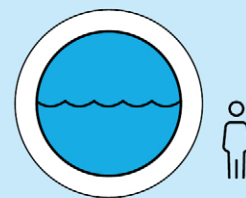
Thames Tideway tunnels  
7.2m internal diameter  
completed in 2023



Elizabeth Line tunnels  
6.2m internal diameter  
completed in 2015



Northern Line Extension  
tunnels 5.2m internal  
diameter completed in 2017



Main Teddington Direct  
River Abstraction tunnel  
3.5m internal diameter



## Building the raw water conveyance pipeline

We're considering building a new 500 metre pipeline between the proposed intake on the riverbank, close to Burnell Avenue, and a site at Tudor Drive, to form an underground connection with the existing Thames Lee Tunnel.

If we proceed with this pipeline option, then it would be built using a pipe-jacking method, which involves launching a pipe-jacking unit via a drive shaft and then lowering tunnel segments into the ground, while removing excavated material. As with tunnel boring machines (TBMs), pipe-jacking is a tried-and-tested tunnelling method (also used on the Thames Tideway project), with minimal risks to properties above the proposed tunnel route.

## Protecting properties during tunneling operations

TBM and pipe-jacking tunnelling are tried-and-tested construction methods, used successfully in numerous projects across Greater London. These are some of the measures that we'd use to minimise the impacts on nearby properties.

- We'll seek to carry out detailed ground surveys and settlement assessments, as well as property surveys, where appropriate, to ensure that tunnelling methods used mitigate against ground settlement
- In advance of any tunnelling, we'd seek to undertake defect surveys of properties, where appropriate, to record their pre-tunnelling condition, so that changes caused by tunnelling works (such as hairline cracks) could be identified and, if needed, addressed
- We'd most likely use an earth pressure balance TBM, designed to balance earth and water pressures and support the face of the tunnel excavation during tunnelling. Earth pressure balance TBMs are often used for soft ground tunnelling in urban areas
- If needed, we would carry out ground improvement or treatment, during or after tunnelling works, to reinforce the ground and provide extra stability
- The tunnel will be lined with pre-cast concrete segments to support the ground as the tunnel is being excavated by the TBM
- We'd carry out monitoring of the tunnel lining, the surrounding ground and properties on the surface, to detect any small movements of the ground