Currently, untreated sewage regularly overflows into the River Thames from London’s Victorian sewerage system via combined sewer overflows (CSOs). The proposed Thames Tunnel would intercept these overflows through the use of a new storage and transfer tunnel, which would link west London and Abbey Mills Pumping Station. The sewage flow would then be transferred to Beckton Sewage Treatment Works via the Lee Tunnel. The reduction in untreated sewage entering the River Thames would bring long-term benefits for the environment and users of the River Thames.

**Key facts**

- **Local authority:** Southwark
- **CSO name:** Shad Thames Pumping Station
- **CSO spill volume in an average year:** 92,000m³ (equivalent to approximately 37 Olympic swimming pools)
- **Works proposed:** Modifications to the existing sewerage system*
- **Duration of main construction works:** Approximately one and a half years.

*Replacement works for the interception of Shad Thames Pumping Station CSO at Druid Street proposed at phase one consultation.*
Section 1: Introduction and site information

We would seek to control the existing CSO, known as the Shad Thames Pumping Station CSO, which would not be intercepted by the main tunnel. In order to deliver the project we are proposing to use parts of our existing pumping station for this construction work and permanent structures required to control the CSO.

The location of the Shad Thames Pumping Station is shown in Figure 1A. The site is accessed from Maguire Street to the east, Tamarind Court to the south, Vanilla and Sesame Court to the west and Wheat Wharf is to the north. The site is within the Tower Bridge Conservation Area. We own the existing pumping station site.

This site information paper sets out our proposals at Shad Thames Pumping Station. We have also produced project information papers, which cover overarching topics relating to the project. Where we consider that a project information paper is particularly relevant, we have highlighted this in a related documents box. At the end of this site information paper is a list of other documents, which may be of interest and a glossary of terms.

How we chose this site

What we proposed at phase one consultation

At our phase one consultation, which was held between September 2010 and January 2011, we identified the need to connect the Shad Thames Pumping Station CSO, to the main tunnel. We proposed the use of St John’s playground fronting on to Druid Street for this construction work and to accommodate permanent structures required to operate the main tunnel. The location of our preferred site at phase one consultation, Druid Street, is shown in Figure 1A.

What we are proposing at phase two consultation

Since phase one consultation, further technical work has established that there is no longer a need to connect the Shad Thames Pumping Station CSO to the main tunnel. Instead it is proposed that storm flows are managed by utilising existing storage in the sewers upstream of the pumping station and implementing works at Shad Thames Pumping Station to inhibit it from pumping flows from the CSO into the River Thames.

After a storm, new pumps would be used to return stored sewage to the local sewerage system. In extreme storm events, the existing pumps in Shad Thames Pumping Station would be used to discharge storm flows to the River Thames. The site at Druid Street is therefore no longer required and works are instead proposed within the Shad Thames Pumping Station and Maguire Street.

In July 2011 we held drop-in sessions for the community around the site to understand any issues they may have, should there be a site at Shad Thames Pumping Station. We reviewed all the comments we received and took these into account.

Shad Thames Pumping Station is our chosen site to control the Shad Thames Pumping Station CSO.
Figure 1A: Shad Thames Pumping Station and Druid Street location plan
Section 2: Construction

Construction activities

The works would last approximately one and a half years in total and would be undertaken during typical standard working hours. The majority of works are to be conducted within our existing property boundary. The works consist of:

- Modifications to the pumps and internal pipe work including excavation within the pumping station.
- Demolition of the existing three storey facilities building behind the existing pumping station.
- Construction of new electrical equipment building in place of the facilities building.
- Provision of new pumps.
- Modifications to the existing sewers within Maguire Street outside of the pumping station.
- Construction of a new vehicle access to Maguire Street and alterations to the front of the existing building.

Our typical working hours are expected to be:

Standard: 8am-6pm weekdays, 8am-1pm Saturday

* Standard working hours would also include, subject to agreement with the local authority:
  - a short period (up to 1 hour) before works start and after they have finished to allow our workers to prepare for work and check the site.
  - equipment and machinery maintenance could also take place 1pm-5pm Saturday and 10am-4pm Sunday.

Related documents:

Managing construction
Site layout

The works would be contained within the site boundaries shown in Figure 1A with the exact layout subject to the construction method chosen by the contractor.

Construction transport and access

We would transport materials to and from the site by road.

Construction traffic would access the site from Jamaica Road (A200), Shad Thames and Maguire Street. Traffic leaving the site would turn right from Maguire Street into Gainsford Street, left into Lapore Street and left onto Tooley Street (A200). Beyond this, construction traffic would use the major road network to get to and from its final destination.

We may need to suspend or relocate some parking bays on Maguire Street during construction. Footpath and road diversions would also be undertaken on the west side of Shad Thames during the pumping station work, and across its full width whilst works are undertaken in Maguire Street. Based on our current design we do not anticipate that any bus stop relocations or junction changes would be required.

Related documents:

Transport
Shad Thames Pumping Station

Management of construction works

Our construction works would be managed in accordance with an agreed Code of construction practice (CoCP). For phase two consultation, we have produced a draft CoCP Part A: General requirements, informed by CoCPs from other major construction projects in London and consultation with the local authorities. Through the environmental impact assessment process, scheme-wide principles to address potential effects on the local environment have been identified and integrated into the design. The CoCP Part A sets out scheme-wide control measures that would be used to minimise potential effects during the construction process.

Table 2.1 sets out what we consider to be the key issues for this site during construction, and how we are currently proposing to address them.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Our response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possible effect of noise and vibration on neighbouring areas.</td>
<td>The contractor would be required to implement noise control measures at the worksite, which will be set out in the CoCP.</td>
</tr>
<tr>
<td>Temporary partial closure of Maguire Street and associated suspension of on-street parking and private parking spaces to allow modifications to the existing sewers within the road.</td>
<td>Access to Maguire Street would remain available from Shad Thames. The existing section of Maguire Street would become two way and a location identified to turn vehicles. The extent and duration of the suspension of any on-street parking during construction would be minimised as far as possible. We are investigating options for temporary replacement parking during construction, where necessary.</td>
</tr>
</tbody>
</table>

Table 2.1: Key issues relating to construction
Section 3: Future use

This section describes the site after the completion of the construction work, ie when the main tunnel is in use – the ‘operational phase’.

Design

The design of the permanent use and appearance of the structures at Shad Thames Pumping Station follows our scheme-wide principles and takes into account comments raised during ongoing engagement with the London Borough of Southwark and other technical consultees.

Our permanent works incorporate those set out at Section 2.

Table 3.1 sets out the site specific issues that have influenced our permanent design proposals and how we have addressed them in our proposed design.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Our response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of permanent works on residential amenity.</td>
<td>The new electrical equipment building and alterations to the pumping station have been designed to reflect the existing buildings form and function, and the character of the surrounding area.</td>
</tr>
<tr>
<td>Effect on Maguire Street.</td>
<td>On completion of the required works, we intend that Maguire Street would be fully reinstated to its existing condition with additional manhole access in the road.</td>
</tr>
</tbody>
</table>

Table 3.1: Site specific issues that have influenced our permanent design
Figures 3A and 3B provide an illustration of our design proposals. Further information on the development of our design can be found in the Design development report.

Related documents:

- Modifications inside pumping station building
- New door for maintenance vehicle access to building
- Main access for maintenance vehicles
- Pedestrian access for maintenance staff
- Works required to boundary wall with Vanilla & Sesame Court
- Existing annex to pumping station demolished and replaced with larger extension for electrical equipment

Figure 3A: Layout of site once construction works complete
Figure 3B: Elevations of proposed building
Operation and maintenance

Once the tunnel is operational, we expect to undertake inspection and maintenance of the mechanical and electrical equipment approximately once every three to six months. This would be undertaken within our site and as part of the existing maintenance routine.

We may also need to make visits to the site for unplanned maintenance or repairs, for example, if there is a blockage, or equipment failure. This may require the use of mobile cranes and vans.

Permanent vehicular access would be from Maguire Street.

Management of operational effects

We have not identified any key issues associated with this site once it is operational. This is because once the site is operational, we do not anticipate there being any difference in the effects from the existing operation of the site as a pumping station.
Further information

This section sets out documents which may be of particular interest. Further information on our proposals can be found on our website (www.thamestunnelconsultation.co.uk) or is available upon request (call our customer centre on 0800 0721 086).

### Phase two public consultation material

Project information papers include general information about the Thames Tunnel project. There are 17 project information papers, which cover various aspects of the project. Those project information papers that may be of particular interest are set out below.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Title</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="change-icon.png" alt="Changes" /></td>
<td>Changes</td>
<td>Explains how the scheme has changed compared to that presented at phase one consultation, including changes to the tunnelling strategy for the main tunnel and changes to sites.</td>
</tr>
<tr>
<td><img src="design-icon.png" alt="Design" /></td>
<td>Design</td>
<td>Contains the design principles which have influenced the permanent appearance of our sites once construction work is complete.</td>
</tr>
<tr>
<td><img src="tree-icon.png" alt="Environment" /></td>
<td>Environment</td>
<td>Sets out the process the project is following to assess potential environmental effects of the Thames Tunnel project.</td>
</tr>
<tr>
<td><img src="hardhat-icon.png" alt="Managing construction" /></td>
<td>Managing construction</td>
<td>Includes information on what measures our contractors will put in place at our sites during construction.</td>
</tr>
<tr>
<td><img src="umbrella-icon.png" alt="Overflow" /></td>
<td>Overflow</td>
<td>Sets out how London’s sewerage system works and why the capital has an overflow problem.</td>
</tr>
<tr>
<td><img src="truck-icon.png" alt="Transport" /></td>
<td>Transport</td>
<td>Contains information on the different transport options we have considered for delivering and removing materials from our sites.</td>
</tr>
</tbody>
</table>
### Technical reports

<table>
<thead>
<tr>
<th>Theme</th>
<th>Icon</th>
<th>Title</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interim engagement</td>
<td></td>
<td>Interim engagement report</td>
<td>Provides a summary of the public engagement we have undertaken between phase one and phase two consultations.</td>
</tr>
<tr>
<td>Phase two construction information</td>
<td></td>
<td>Code of construction practice Part A: General requirements (CoCP)</td>
<td>Sets out control measures to be adopted during the project construction period.</td>
</tr>
<tr>
<td>Phase two scheme development</td>
<td></td>
<td>Design development report</td>
<td>Provides a general overview of how the scheme design at each site has evolved to date. Please refer to chapter 26 for more information on this site.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
<td></td>
<td></td>
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<tr>
<td>-------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combined sewer</td>
<td>A single sewer system that takes both rainwater and domestic and industrial wastewater.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combined sewer overflow (CSO)</td>
<td>A structure, or series of structures, that allows sewers to overflow into the river when they are full as a result of increased rainfall. Without the overflows, the sewers would back up and cause flooding in streets or houses.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conservation area</td>
<td>An area designated by the local authority or English Heritage as having special architectural or historical interest.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Draft limit of land to be acquired or used</td>
<td>The extent of land that we may need to use or acquire, or over which rights may be needed to carry out works that are essential to the project.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main tunnel</td>
<td>The tunnel from Acton Storm Tanks to Abbey Mills Pumping Station.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational phase</td>
<td>After the completion of the construction work, when the main tunnel is in use.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thames Tunnel project</td>
<td>The Thames Tunnel project comprises a storage and transfer tunnel, from west London to Beckton Sewage Treatment Works in east London, and the control of 34 CSOs along the Thames Tideway.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Phase two consultation: Shad Thames Pumping Station

Autumn 2011

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It is very important that you understand the information we have provided. If you need further information in another language, braille, large print or audio format please contact us on 0800 0721 086.

For further information or to comment on our proposals see our website: www.thamestunnelconsultation.co.uk