Appendix M – Heathwall Pumping Station (formerly Tideway Walk)

M.1 Introduction
M.1.1 This appendix sets out the site selection process that we used and our rationale for identifying our preferred phase one and phase two consultation sites to intercept the Heathwall Pumping Station and South West Storm Relief CSOs.

Type of site
M.1.2 We need a worksite to connect the local combined sewer overflows (CSOs), known as the Heathwall Pumping Station and South West Storm Relief CSOs, to the main tunnel. To enable the connection to be made the site needs to be as close as possible to the line of the existing sewers.

Site selection process
M.1.3 All potential worksites have been identified in accordance with our Site selection methodology paper (SSM), which involved a ‘sieving’ approach, commencing with identification of all potentially suitable areas of land (excluding concentrated residential sites and World Heritage Sites) and passing these sites through increasingly detailed levels of assessment to move from a long list to a draft short list, a final short list and finally a list of preferred sites for phase one consultation.

M.1.4 A plan showing all the sites considered for the interception of the Heathwall Pumping Station CSO and how they progressed during the site selection process can be found in Annex M.1.

Preferred site for phase one and phase two consultation
M.1.5 The table below identifies our preferred sites at phase one and phase two consultation to intercept the Heathwall Pumping Station and South West Storm Relief CSOs. Section M.2 of this appendix provides the details of how we identified our preferred phase one site. Sections M.3 to M.5 provide details of why we have identified a different preferred site for phase two consultation.

| Phase one consultation site: | Tideway Walk – combined main tunnel and CSO site |
| Phase two consultation site: | Heathwall Pumping Station – CSO interception only |
|                            | (Kirtling Street – main tunnel site – see Appendix L) |
M.2 Site selection up to phase one consultation

Assessment of the long list sites

M.2.1 The long list of potential sites to intercept the Heathwall Pumping Station and South West Storm Relief CSOs was created by conducting a desktop survey of the land in the vicinity of the existing sewer.

M.2.2 The Heathwall Pumping Station (CS16X) and South West Storm Relief (CS17X) are close together and therefore have been considered together.

M.2.3 In total, five sites were included on the long list. These sites were assessed having regard to the high-level considerations set out in Table 2.2 of the SSM (hereafter referred to as Table 2.2) including engineering (site size, site features, availability of jetty/wharf and access), planning and environment (heritage, landscape/townscape, open space and ecological) and community and property (neighbouring land uses, site use, Special Land/Crown Land and acquisition costs) considerations.

M.2.4 The table below provides a summary of the outcome of the Table 2.2 assessment in respect of the long list of sites considered for the interception of this CSO. Sites which were assessed as being the least constrained when considered against Table 2.2 considerations passed to the draft short list. This did not necessarily mean that these sites would ultimately be judged as suitable, but that no significant constraints were identified in relation to the high-level considerations addressed at Table 2.2. Sites that were judged to be more constrained were not recommended to be retained on the draft short list for more detailed assessment. The main rationale for the exclusion of these sites at this stage is summarised in the table.

Table M.1 Long list to draft short list for the interception of the Heathwall Pumping Station and South West Storm Relief CSOs (Table 2.2 assessment)

<table>
<thead>
<tr>
<th>Site ID</th>
<th>Site name/ description</th>
<th>Recommendation and rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>C16XA</td>
<td>Foreshore, adjacent to Heathwall Pumping Station (partly overlaps with C17XA)*</td>
<td>Recommendation: To draft shortlist</td>
</tr>
<tr>
<td>C17XA</td>
<td>Foreshore, adjacent to Middle Wharf (partly overlaps with C16XA)*</td>
<td>Recommendation: To draft shortlist</td>
</tr>
<tr>
<td>C17XB</td>
<td>Part of Heathwall Pumping Station and Middle Wharf *</td>
<td>Recommendation: To draft shortlist</td>
</tr>
<tr>
<td>C17XC</td>
<td>Post office, Nine Elms Lane+</td>
<td>Recommendation: To draft shortlist</td>
</tr>
</tbody>
</table>
Appendix M – Heathwall Pumping Station (formerly Tideway Walk)

Phase two scheme development report

Part two: Appendices

Page 233

<table>
<thead>
<tr>
<th>Site ID</th>
<th>Site name/ description</th>
<th>Recommendation and rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>C17XD</td>
<td>Parking area, New Covent Garden Market+</td>
<td><strong>Recommendation:</strong> To draft shortlist</td>
</tr>
</tbody>
</table>

**NB.** The Site ID and Site name/-description were used as an internal mechanism to record and describe the site but may be updated if necessary. Sites marked with * can potentially intercept both Heathwall Pumping Station (CS16X) and South West Storm Relief (CS17X), but sites marked with + can potentially only intercept South West Storm Relief (CS17X). Originally, sites were identified to intercept each CSO, so hence why some sites overlap.

M.2.5 Of the five sites identified, all five were assessed as potentially suitable and passed to the draft short list.

**Assessment of draft short list sites**

M.2.6 The five draft short list sites identified for further assessment at the next stage were:

- C16XA: Foreshore, adjacent to Heathwall Pumping Station (partly overlaps with C17XA)
- C17XA: Foreshore, adjacent to Heathwall Pumping Station (partly overlaps with C16XA)
- C17XB: Part of Heathwall Pumping Station and Middle Wharf
- C17XC: Post office, Nine Elms Lane
- C17XD: Parking area, New Covent Garden Market.

M.2.7 These sites were further assessed by the engineering, planning, environment, community and property disciplines, having regard to the considerations set out in Table 2.3 of the SSM (hereafter referred to as Table 2.3). This stage of the process built on the information gathered and assessment undertaken at long list stage but focussed on more detailed local considerations.

M.2.8 At this stage, we also consulted with each of the London boroughs and pan-London stakeholders, such as the Environment Agency and English Heritage, to seek their views on the suitability of sites for the short list.

M.2.9 The table below summarises the outcome of the Table 2.3 assessment of the draft short list of sites. Sites which were assessed as being the least constrained when considered against Table 2.3 considerations were retained on the short list to pass to the next stage of assessment. This did not necessarily mean that a site would ultimately be judged as suitable, but that no significant constraints were identified in relation to the considerations addressed at Table 2.3. Sites that were judged to be more constrained were not recommended to be retained on the short list for more detailed assessment. The main rationale for the exclusion of these sites at this stage is summarised below.
<table>
<thead>
<tr>
<th>Site ID</th>
<th>Site name/ description</th>
<th>Recommendation and rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>C16XA</td>
<td>Foreshore, adjacent to Heathwall Pumping Station (partly overlaps with C17XA)*</td>
<td><strong>Recommendation:</strong> Retain on short list</td>
</tr>
<tr>
<td>C17XA</td>
<td>Foreshore, adjacent to Middle Wharf (partly overlaps with C16XA)*</td>
<td><strong>Recommendation:</strong> Retain on short list</td>
</tr>
<tr>
<td>C17XB</td>
<td>Part of Heathwall Pumping Station and Middle Wharf *</td>
<td><strong>Recommendation:</strong> Retain on short list</td>
</tr>
</tbody>
</table>
| C17XC  | Post office, Nine Elms Lane+                                                           | **Recommendation:** Not to shortlist  
**Rationale:**  
- Engineering – Use of this site would require a very deep interception (about 19m).  
- Property – The site would require loss of parking affecting post office business. This would result in a high acquisition cost.  
- Community – There is likely to be a significant local economic impact using this site due to the impact on the post office. |
| C17XD  | Parking area, New Covent Garden Market+                                                | **Recommendation:** Not to shortlist  
**Rationale:**  
- Engineering – Use of this site would require a very deep interception (about 19m).  
- Planning/Environment – Planning was approved in 2008 for a change in use from a bank to an educational facility.  
- Property – Loss of parking at New Covent Garden Market would result in high acquisition cost.  
- Community – There may be some impact on equalities considerations and the local community, whilst there is likely to be a significant local economic impact due to impact on New Covent Garden Market. |
Of the five sites on the draft short list, three were assessed as potentially suitable and passed to the final short list, while two sites did not proceed to the final short list. Further details of all the sites shortlisted at this stage of the site selection process can be found in the *Shortlisted Sites Report*.

### Assessment of the final short list sites

The three sites identified for inclusion on the final short list and assessment at the next stage were:

- **C16XA**: Foreshore, adjacent to Heathwall Pumping Station (partly overlaps with C17XA)
- **C17XA**: Foreshore, adjacent to Middle Wharf (partly overlaps with C16XA)
- **C17XB**: Part of Heathwall Pumping Station and Middle Wharf.

A site suitability report (SSR) was prepared for each of the final shortlisted sites. These reports contained an assessment of each site’s suitability, having regard to engineering, planning, environment, community and property considerations. At this stage in the process, sites were assessed in isolation without comparison to other sites or regard to tunnelling strategy. Sites were evaluated by each discipline, using technical knowledge and professional judgement as appropriate, and assessed as either **suitable**, **less suitable** or **not suitable** from that discipline’s perspective.

A summary of the conclusions of each discipline’s assessment from the site suitability reports is provided below.

#### **C16XA**: Foreshore, adjacent to Heathwall Pumping Station

Site C16XA is located in the foreshore of the River Thames, close to Nine Elms Lane in the London Borough of Wandsworth. This site also partly overlaps C17XA.

The site adjoins a predominantly industrial area. The site is located to the northeast of the Thames Water Heathwall Pumping Station and safeguarded Middle Wharf. Several houseboats and a restaurant are moored west of this site.

**Engineering**: The site was considered **suitable** as a CSO site because it is of adequate size and would have reasonable access direct from a major road through Thames Water owned land.

**Planning**: On balance, the site was considered **suitable** as a CSO site. Despite there being a number of applicable planning and environmental designations, these should not be unacceptably impacted upon.
Furthermore, during and after the works, the structures should not appear prominent in this industrial area.

M.2.18 **Environment:** Overall, the site was assessed as suitable for use as a CSO site. The site was considered likely to be suitable from the perspectives of transport, archaeology, built heritage and townscape, hydrogeology and air quality. However, the site was considered less suitable from the perspective of surface water, ecology, flood risk, noise and land quality. Various mitigation measures would be required.

M.2.19 **Socio-economic and community:** The site was assessed as suitable for use as a CSO site. The greatest impact will be disruption experienced by the houseboats (Tideway Dock and Nine Elms Pier) and restaurant (the Battersea Barge) adjacent to the site. Mitigation would involve relocation, which may be difficult considering mooring availability on the River Thames in London.

M.2.20 **Property:** The site was assessed as suitable for use as a CSO site as the acquisition costs are likely to be acceptable. However, a special ministerial procedure may be required which could cause delays.

**C17XA: Foreshore, adjacent to Middle Wharf**

M.2.21 Site C17XA is located in the foreshore of the River Thames, close to Nine Elms Lane in the London Borough of Wandsworth. This site also partly overlaps C16XA.

M.2.22 The site adjoins a predominantly industrial area. The site is located to the northeast of the Thames Water Heathwall Pumping Station and safeguarded Middle Wharf. Several houseboats and a restaurant are moored west of this site.

M.2.23 **Engineering:** The site was considered suitable as a CSO site because it is relatively unrestricted in size and shape and would have reasonable access direct from a major road.

M.2.24 **Planning:** On balance, the site is considered suitable as a CSO site. Despite there being a number of applicable planning and environmental designations, these should not be unacceptably impacted upon. Furthermore, during and after the works, the structures should not appear prominent in this industrial area.

M.2.25 **Environment:** Overall, the site was assessed as suitable for use as a CSO site. The site was considered likely to be suitable from the perspectives of transport, archaeology, built heritage and townscape, hydrogeology and air quality. However, the site was considered less suitable from the perspective of surface water, ecology, flood risk, noise and land quality. Various mitigation measures would be required.

M.2.26 **Socio-economic and community:** The site was assessed as suitable for use as a CSO site. The greatest impact will be disruption experienced by the houseboats (Tideway Dock and Nine Elms Pier) and restaurant (the Battersea Barge) adjacent to the site. Mitigation would involve relocation, which may be difficult considering mooring availability on the River Thames in London.
M.2.27 **Property:** The site was assessed as **suitable** for use as a CSO site as the acquisition costs are likely to be acceptable. However, a special ministerial procedure may be required which could cause delays.

**C17XB: Part of Heathwall Pumping Station and Middle Wharf**

M.2.28 Site C17XB is located on part of the Heathwall Pumping Station site and the safeguarded Middle Wharf, which was formerly a used as a concrete batching plant. The site is also adjacent to the River Thames in the London Borough of Wandsworth.

M.2.29 Immediately to the north of the site are the River Thames foreshore and a jetty. To the east is a small open space and an eight-storey residential block known as Elm Quay. Opposite the site to the south, there is an office/factory and the Tideway Industrial Estate. To the west of the site are the Thames Water Heathwall Pumping Station and a Fed Ex building located on the Tideway Industrial Estate.

M.2.30 **Engineering:** The site was considered **suitable** as a CSO site because it is of adequate size and would have good road access.

M.2.31 **Planning:** On balance, the site was considered **suitable** as a CSO site. Despite there being a number of applicable planning and environmental designations, these should not be unacceptably impacted upon. The site is located on a safeguarded wharf which may provide opportunity for river transport.

M.2.32 **Environment:** Overall, the site was assessed as **suitable** for use as a CSO site. The site was considered likely to be **suitable** from the perspectives of transport, archaeology, built heritage and townscape, water resources (both hydrogeology and surface water), ecology, flood risk and air quality. However, the site was considered **less suitable** from the perspective of noise and land quality. Various mitigation measures would be required.

M.2.33 **Socio-economic and community:** The site was assessed as **suitable** for use as a CSO site. The greatest impact will be disruption experienced by the houseboats (Tideway Dock and Nine Elms Pier) and restaurant (the Battersea Barge) adjacent to the site. Mitigation would involve relocation, which may be difficult considering mooring availability on the River Thames in London. The use of the site is unlikely to have significant impact upon the local community, given its existing use. Furthermore, the site is due to be decommissioned so there will unlikely be impacts on the local economy (NB. The site has now been cleared).

M.2.34 **Property:** The site was assessed as **suitable** for use as a CSO site as the site is owned by Thames Water.

**Identification of the preferred site for phase one consultation**

M.2.35 Following the completion of the SSRs, a multidisciplinary workshop was held to compare the suitability of each of the shortlisted sites based on the SSR assessments and to make a recommendation on which site should be identified as the preferred site.
M.2.36 The preferred site for the interception of the Heathwall Pumping Station CSO and South East Storm Relief CSO is C17XB. The CSO site was combined with the main tunnel sites (S79WH and S80WH, which also partly overlaps C17XB), so together these sites became collectively known as Tideway Walk (S79WH/S80WH/C17XB – see Appendix L for discussion on main tunnel sites in Zone S5 – Battersea).

M.2.37 C17XB (part of Heathwall Pumping Station and Middle Wharf, with the drop shaft being constructed on land) was identified as the preferred site to intercept both CSOs. The reason for this decision is summarised below:

• Generally, C16XA/C17XA (overlapping foreshore sites with the drop shaft being constructed within the river) and C17XB (land-based site) are considered suitable in engineering, planning, environmental, community and property terms. However, C16XA/C17XA as foreshore sites would introduce increased construction costs and health and safety risks associated with working in a river environment. It would also locate the temporary and permanent structures in the river foreshore, with a loss of foreshore habitat. Therefore, site C17XB is preferred over C16XA/C17XA (foreshore sites) as a suitable and feasible land-based site that is available in this location, near to the route of these sewers.

• C17XB is owned by Thames Water and includes Heathwall Pumping Station and Middle Wharf, so the proposed use of this site is consistent with the existing uses.

• C17XB contains Middle Wharf, which is designated as a safeguarded wharf with jetty facilities. The wharf may provide an opportunity to export and import construction material via the River Thames, which would reduce the need for vehicular traffic to and from the site.

• From a property point of view, both C16XA/C17XA and C17XB are considered suitable but, as the land-based site is owned by Thames Water, for C17XB there would be no acquisition costs.

M.2.38 C17XB was therefore identified as the preferred site for the interception of South West Storm Relief CSO and Heathwall Pumping Station CSO in association with the preferred main tunnel sites S79WH/S80WH. At phase one consultation, these sites were collectively known as Tideway Walk (S79WH/S80WH/C17XB).

---

2 The engineering of how these CSOs are dealt with in relation to the main tunnel shaft is complicated. Basically, both interceptions would connect to the main shaft, which contains two drop shafts. There is an intermediate shaft next to the South West Storm Relief interception chamber, so its connecting culvert can pass under Heathwall Pumping Station to the main shaft.
M.3 Review of site selection following phase one consultation

Phase one consultation responses

M.3.1 As part of the site selection methodology, all feedback received during the phase one consultation was reviewed and taken into account in the development of our scheme for phase two.

M.3.2 The main issues and concerns raised during phase one consultation in relating to the combined main tunnel shaft and CSO site at Tideway Walk can be summarised as follows:
  - Impact on boat moorings and community severance
  - Impact on residential amenity
  - Impact on the planned regeneration of the area
  - Design of permanent proposals for the site
  - Impact on Cringle Dock Wharf.

M.3.3 The main comments received in support of the preferred site included:
  - it is a brownfield and industrial site and area
  - it would have less impact on existing heritage
  - it has good transport infrastructure and would allow transport of material by barge
  - reduced impact on residential amenity
  - proposals for site after construction considered acceptable.

M.3.4 More detail on the consultation responses relating to the combined Tideway Walk site and our response to these comments are provided in the Report on phase one consultation.

M.3.5 In addition to the consultation comments, further engagement with the London Borough of Wandsworth and the landowner revealed that a large proportion of the Tideway Walk site was unavailable due to a major residential development being granted planning permission and demolition commencing on site. However, the overall tunnelling strategy requires a main tunnel site in the Battersea area. The distance between potential sites in this zone and the next set of potential sites to the east (Zone S6 Shad) is such that a main tunnel site in this zone is required to ensure maximum recommended tunnelling distances are not exceeded, and it is therefore necessary to change tunnel boring machines in this area. There is also a need to intercept the Heathwall PS and South West Storm Relief CSOs.

M.3.6 Therefore this resulted in a need for a back-check to identify alternative locations for a main tunnel site and a CSO site. Due to the lack of land near the Heathwall Pumping Station, this is likely to mean two separate sites would be needed, one for the main tunnel site (see Appendix L – Kirtling Street, which has become the preferred main tunnel site to replace Tideway Walk) and a second to intercept the two local CSOs. The site to connect the two CSOs to the main tunnel would require a much smaller
site with fewer permanent structures so we believe there is still potential for this to be located in the vicinity of the Heathwall Pumping Station.

**Back-check process**

M.3.7 As detailed above, our site monitoring and the phase one consultation feedback identified that the majority of the preferred site at Tideway Walk (S79WH) was no longer available for use for a main tunnel site.

M.3.8 As a result, there was a need to find an alternative main tunnel site (for details see Appendix L – Kirtling Street) and a site to intercept both the Heathwall Pumping Station and South West Storm Relief CSOs. Due to the fact that Kirtling Street, the new preferred main tunnel site, is not close to the location of the Heathwall Pumping Station and South West Storm Relief CSOs which need to be intercepted, a standalone CSO site was required. As a result, we began a ‘back-check’ (as outlined in the site selection methodology) to review our preferred site selection for the interception of the CSOs.

M.3.9 This back-check involved a targeted repeat of each relevant stage of our site selection process to reconsider which site would be most suitable for the interception of the Heathwall Pumping Station and South West Storm Relief CSOs. The following outlines each stage of the back-check process.

**Assessment of the back-check long list sites**

M.3.10 A number of potential CSO sites were identified in the vicinity of the two CSOs. Basically, there is a choice between a foreshore site (adjacent to Heathwall Pumping Station and Middle Wharf) and land-based site (Heathwall Pumping Station and Middle Wharf). The site areas and site IDs were simplified so a comparison could be easily made between them. The following sites were assessed:

- C16XA: Foreshore (adjacent to Heathwall Pumping Station and Middle Wharf) – previously C16XA and C17XA
- C16XB: Heathwall Pumping Station (includes Middle Wharf) – previously part of C17XB.

M.3.11 Sites C17XA (to avoid having overlapping foreshore sites) and C17XB (to avoid having overlapping land-based sites) were withdrawn so they were replaced by the new sites, as outlined above. This allows for a more straightforward comparison between building the drop shaft on a foreshore site or a land-based site which are capable of intercepting both CSOs.

M.3.12 The back-check long list sites were assessed against the engineering, planning, environment, community and property considerations set out in Table 2.2.

The table below summarises the outcome of the ‘back-check’ assessment of the back-check long list of sites. Sites which were assessed as being the least constrained when considered against Table 2.2 considerations passed to the next stage of assessment. This did not necessarily mean that these sites would ultimately be judged as suitable, but that no
significant constraints were identified in relation to the high-level considerations addressed at Table 2.2. Sites that were judged to be more constrained were not recommended to be passed to the back-check draft short list for more detailed assessment. The main rationale for the exclusion of these sites at this stage is summarised in the table.

Table M.3 Long list to draft short list for the interception of the Heathwall Pumping Station and South West Storm Relief CSOs (Table 2.2 assessment)

<table>
<thead>
<tr>
<th>Site ID</th>
<th>Site name/description</th>
<th>Recommendation and rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>C16XA</td>
<td>Foreshore (adjacent to Heathwall Pumping Station and Middle Wharf)</td>
<td>Recommendation: To draft shortlist</td>
</tr>
<tr>
<td>C16XB</td>
<td>Heathwall Pumping Station (includes Middle Wharf)</td>
<td>Recommendation: To draft shortlist</td>
</tr>
</tbody>
</table>

NB. The Site ID and Site name/description were used as an internal mechanism to record and describe the site but may be updated if necessary.

M.3.13 Full details are provided in back-check Table 2.2 assessment tables and accompanying plans.

M.3.14 Of the two sites identified, both were assessed as potentially suitable and passed to the draft short list.

Assessment of the back-check draft short list sites

M.3.15 The two back-check draft shortlisted sites were then further assessed by the engineering, planning, environment, community and property disciplines having regard to the considerations set out in Table 2.3 of the SSM.

M.3.16 The table below summarises the outcome of the ‘back-check’ assessment of the draft short list of sites. Sites which were assessed as being the least constrained when considered against Table 2.3 considerations were retained on the back-check short list to pass to the next stage of assessment. This did not necessarily mean that a site would ultimately be judged as suitable, but that no significant constraints were identified in relation to the considerations addressed at Table 2.3. Sites that were judged to be more constrained were not recommended to be retained on the back-check short list for more detailed assessment.

M.3.17 The main rationale for the exclusion of these sites at this stage is summarised below.
Table M.4 Draft short list to final short list for the interception of the Heathwall Pumping Station and South West Storm Relief CSOs (Table 2.3 assessment)

<table>
<thead>
<tr>
<th>Site ID</th>
<th>Site name/ description</th>
<th>Recommendation and rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>C16XA</td>
<td>Foreshore (adjacent to Heathwall Pumping Station and Middle Wharf)</td>
<td><strong>Recommendation:</strong> Retain on short list</td>
</tr>
<tr>
<td>C16XB</td>
<td>Heathwall Pumping Station (includes Middle Wharf)</td>
<td><strong>Recommendation:</strong> Retain on short list</td>
</tr>
</tbody>
</table>

NB. The Site ID and Site name/description were used as an internal mechanism to record and describe the site but may be updated if necessary.

M.3.18 Full details are provided in back-check Table 2.3 assessment tables and accompanying plans.

M.3.19 Of the two sites on the draft short list, both were assessed as potentially suitable and passed to the final short list.

**Assessment of the back-check final short list sites**

M.3.20 The two back-check final shortlisted sites identified for assessment at the next stage were:
- C16XA: Foreshore (adjacent to Heathwall Pumping Station and Middle Wharf)
- C16XB: Heathwall Pumping Station (includes Middle Wharf).

M.3.21 A site suitability report (SSR) was prepared for the new back-check final short list site and the SSR for the phase one shortlisted site was re-evaluated.

**C16XA: Foreshore (adjacent to Heathwall Pumping Station and Middle Wharf)**

M.3.22 While a number of development plan documents have been adopted since the SSR was completed, the updated policies do not have an impact on the final planning assessment recommendation.

M.3.23 All other discipline recommendations remain unchanged.

**C16XB: Heathwall Pumping Station (includes Middle Wharf)**

M.3.24 Site C16XB is located within the Nine Elms Industrial Area of the London Borough of Wandsworth. The site comprises a Thames Water pumping station and a vacant safeguarded wharf containing an existing electrical substation and jetty.

M.3.25 The site is bounded to the north by the River Thames, fronts onto Nine Elms Lane to the south, and is situated between the Tideway Industrial Estate and Elm Quay. The wider area is industrial in character and consists of warehouse buildings, depots and office accommodation.
Appendix M – Heathwall Pumping Station (formerly Tideway Walk)

M.3.26 **Engineering:** The site was assessed as suitable as a CSO site because it would be of adequate size, good river access and available road access.

M.3.27 **Planning:** The site was assessed as suitable for a CSO site. There are a number of planning designations applicable to the site, but it is considered that, with appropriate mitigation measures, these designations are unlikely to be unacceptably impacted upon. Furthermore, part of the site is designated for the construction of the Thames Tunnel. The eastern portion is a safeguarded wharf (Middle Wharf) and the works are likely to be acceptable for such a site, provided they do not impact on the future development potential of the site.

M.3.28 **Environment:** Overall, the site was assessed as suitable for use as a CSO site. The site was considered likely to be suitable from the perspectives of transport, archaeology, built heritage, townscape, hydrogeology, air quality and noise. However, the site was considered less suitable from the perspectives of surface water, flood risk, ecology and land quality. Various mitigation measures would be required.

M.3.29 **Socio-economic and community:** The site was assessed as suitable for use as a CSO site. There will be some impact on the houseboat community moored to the west of the site and, given the location of the shaft, the residents of apartments at Elm Quay. However, given the distance to these, the impacts are unlikely to be significant.

M.3.30 **Property:** The site was assessed as suitable for use as a CSO site as the site is primarily within Thames Water’s ownership. Furthermore, the area which is not in Thames Water’s ownership is undeveloped foreshore and therefore acquisition costs are likely to be acceptable. However, the foreshore and riverbed part of the worksite is likely to be Crown or PLA owned land. Crown land cannot be compulsorily purchased or, if owned by the PLA, there are risks associated with acquiring land by compulsory purchase from another statutory undertaker.

M.4 **Preferred site recommendation**

M.4.1 Following the completion of the back-check process, a multidisciplinary workshop was held to assess the suitability of a site to intercept both the Heathwall Pumping Station and South West Storm Relief CSOs. The comparison was between a foreshore site (C16XA) and land-based site (C16XB).

M.4.2 This workshop took into account the findings of all the SSRs and the feedback received during the phase one consultation. On the basis of the assessments described above and professional judgement, it was agreed by all disciplines that C16XB should become the recommended phase two consultation preferred site for the interception with a combined drop shaft for both the Heathwall Pumping Station and South West Storm Relief CSOs. This meant that we believe this to be the most appropriate site, subject to further engagement with stakeholders and further design development to verify this conclusion prior to phase two consultation.
M.4.3 In summary, Heathwall Pumping Station (including Middle Wharf) (C16XB) was identified as the most suitable site because:

- C16XB is an available and suitable land-based site that avoids the impacts associated with working the in foreshore (C16XA)
- C16XB site allows the interception of both CSOs and room for the CSO drop shaft in one location, thereby minimising the impact of permanent works in the foreshore
- C16XB is owned by Thames Water.

M.5 Site development

M.5.1 Following the selection of Heathwall Pumping Station (including Middle Wharf) as the recommended preferred site, further feedback from stakeholders and ongoing scheme development work have contributed to a number of further site changes.

Engagement with stakeholders

M.5.2 Engagement with stakeholders has been ongoing and has continued beyond the phase one consultation period. This has resulted in continual development of our proposals to take on board the comments made by stakeholders.

M.5.3 In particular, we have continually engaged through regular meetings and workshops with officers from the London Borough of Wandsworth, TfL, the Environment Agency and English Heritage with respect to developing the design and construction of our works and the scope of our environmental assessments. To ensure our design process is transparent, we undertook a series of design reviews, hosted and chaired by the Design Council CABE (formerly the Commission for Architecture and the Built Environment). The reviews for Heathwall Pumping Station were attended by the London Borough of Wandsworth and our pan-London stakeholders.

Construction layout

M.5.4 In response to stakeholder engagement, phase one consultation responses and scheme development, the construction layout of the site has been altered to minimise impact on the local community and environment and is guided by operational and functional requirements. Particular factors at this site that have influenced the layout are as follows:

- The site has been designed to maximise the use of the existing pumping station, minimise the effect on river navigation to nearby wharves and utilise land in our ownership.

M.5.5 Further information on the construction logistics and the site layouts for the construction and operational phases can be found in the Heathwall Pumping Station site information paper.

Design

M.5.6 Since this site was selected as our recommended preferred site, we have also progressed the design for the permanent use and look of Heathwall
Appendix M – Heathwall Pumping Station (formerly Tideway Walk)

Pumping Station, taking into account comments made at our phase one consultation and the ongoing engagement with the London Borough of Wandsworth and other technical consultees.

M.5.7 Full details of design development for the Heathwall Pumping Station site are provided in the *Design development report*.

M.6 **Phase two consultation**

M.6.1 A final preferred site workshop was held in summer 2011 to verify the choice of preferred sites and to consider any outcomes of further engagement and scheme development. The conclusion reached was that *Heathwall Pumping Station should become the phase two consultation preferred site for the interception of both the Heathwall Pumping Station and South West Storm Relief CSOs*.

M.6.2 Phase two consultation will provide an opportunity for the public to comment on our revised preferred site and scheme for the Thames Tunnel project, before we publicise our proposed application.
Annex M.1
This is a working draft plan which has been produced for the purpose of phase two consultation on the Thames Tunnel project.

The information shown on the plan is illustrative of what will be required for the purpose of constructing and operating the Thames Tunnel project. The information shown on the plan may change as a result of Thames Water’s consideration of the responses received to phase two consultation and any further design development that is carried out.

Legend
- Local authority boundary (OS)
- Pumping Station
- CSO directly controlled

Site Selection
- No at Table 2.2
- No at Table 2.3
- Preferred site for the preferred tunnel route
- Not a preferred site

Note
- Sites C17XA and C17XB have been retired.

Map's Title: Preferred List: CSO Sites
- CS16X - Heathwall Pumping Station
- CS17X - South West Storm Relief

Legend
- Local authority boundary (OS)
- Pumping Station
- CSO directly controlled

Site Selection
- No at Table 2.2
- No at Table 2.3
- Preferred site for the preferred tunnel route
- Not a preferred site

Note
- Sites C17XA and C17XB have been retired.