

Thames Tideway Tunnel  
Thames Water Utilities Limited



# Application for Development Consent

Application Reference Number: WWO10001

## Design and Access Statement

Doc Ref: **7.04**

### Part 3

#### King Edward Memorial Park Foreshore

APFP Regulations 2009: Regulation **5(2)(a)**

Hard copy available in  
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January 2013

Thames  
Tideway Tunnel   
Creating a cleaner, healthier River Thames

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# Section 23

## King Edward Memorial Park Foreshore

### 23.1 Introduction

23.1.1 A worksite is required to connect the North East Storm Relief CSO to the main tunnel. The proposed development site is known as King Edward Memorial Park Foreshore, which is located in the Shadwell ward of the London Borough of Tower Hamlets.

23.1.2 Some elements of the detailed design proposals would be drawn up at a later stage in consultation with the council and the local community. The detailed designs would be submitted to the local authority for approval in the form of a DCO requirement. Therefore, the majority of the images and plans in this section are for illustrative purposes only. However, the location of the new section of river wall is for approval and the scale of the above-ground structures is indicative.



Figure 23.1: Aerial photograph of the King Edward Memorial Park Foreshore site with LLAU indicated

## 23.2 Existing site context

23.2.1 The site itself comprises the foreshore of the River Thames adjacent to King Edward Memorial Park and an area in the south of the park, including hard-surfaced sections of the Thames Path, a small area of green space and part of the multipurpose sports pitches to the west.

23.2.2 The River Thames foreshore forms part of the strategic Thames Policy Area and the Blue Ribbon Network, and is designated as a Site of Importance for Nature Conservation (Metropolitan Importance).

23.2.3 The site falls within the Wapping Wall Conservation Area, as extended in 2009, and within an Area of Archaeological Importance.

23.2.4 The site is bounded by King Edward Memorial Park and The Highway to the north, the residential Free Trade Wharf building to the east, the River Thames to the south, and by the Shadwell Basin Outdoor Activity Centre to the southwest and Glamis Road to the west.

23.2.5 King Edward Memorial Park is a well-maintained recreational area that comprises large grassed areas, pedestrian paths, mature trees, the King Edward Memorial, a multipurpose sports pitch, a bowling green, a children's play area, a bandstand, and large paved seating areas – some facing the river and some near the memorial alongside The Highway. The eastern part of the park is locally designated as a wildlife area and is planted as a wildflower meadow. The park is a designated open space.

23.2.6 The multipurpose sports pitch, located in the western portion of the park, comprises a rectangular hard surfaced pitch delineated for a range of sports, including football, and is surrounded by a raised wire mesh fence. Two hard surface tennis courts are located immediately to the north of the multipurpose sports pitch, and a further two courts immediately to the east. A park maintenance facility and Tree for Cities maintenance depot are located to the east of the multipurpose sports pitch.

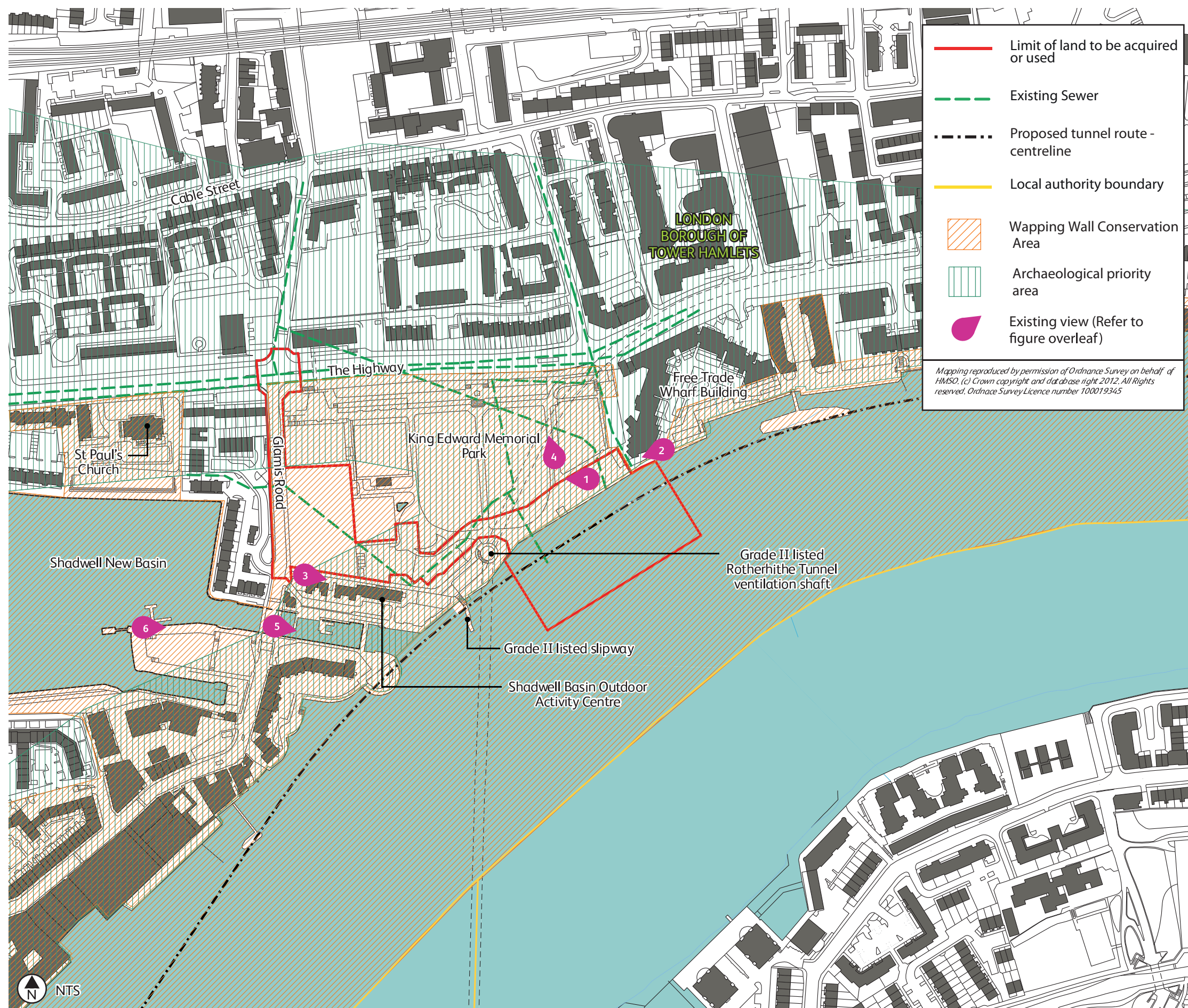


Figure 23.2: Existing site plan



Figure 23.3: Existing bandstand



Figure 23.6: Existing Entrance from Free Trade Wharf



Figure 23.4: Existing entrance on Glamis Road



Figure 23.7: Meadow planting to the east of the park



Figure 23.5: Shadwell boat and Shadwell Basin Outdoor Activity Centre



Figure 23.8: Shadwell Basin bridge

23.2.7 There are a number of listed structures in proximity to the site. The Grade II listed, early 20th century Rotherhithe Tunnel ventilation shaft lies within the park, and the Grade II listed Shadwell Dock Stairs (which is used as a slipway) lies approximately 35m to the west of the site.

23.2.8 No planning applications for the site were submitted within the last five years, however, applications were submitted in relation to other areas in the park. A planning application (Tower Hamlets PA/09/01273) was submitted for an advertisement hoarding within the park, which was subsequently refused. A series of applications were submitted to install a roof on the Rotherhithe Tunnel ventilation building, and of these PA/06/00959 and PA/06/00960 were approved by the council and implemented in full.

23.2.9 During opening hours, the Thames Path runs through the park from Free Trade Wharf in the east, along the river frontage, past the Rotherhithe Tunnel ventilation shaft building, through a narrow alleyway and exits the park at Glamis Road in the west. Outside of opening hours, the Thames Path runs up Glamis Road and along The Highway.

23.2.10 The North East Storm Relief CSO runs beneath the park and discharges into the River Thames through the river wall. There is an existing jetty and decking in the river adjacent to Free Trade Wharf to the east.

23.2.11 The Rotherhithe Tunnel passes beneath the park and its presence is marked by the ventilation shaft building in the southern portion of the park near the river wall.

23.2.12 Shadwell Basin Outdoor Activity Centre to the southwest is a community facility for all ages that makes use of the Shadwell Basin beyond and the River Thames via the listed stairs. The area around Glamis Road is primarily residential and includes St Paul's Church.

**Existing site access and movement**

23.2.13 Pedestrian access to the park is via two points on Glamis Road, two from The Highway, one in front of Free Trade Wharf, and an underpass under The Highway. The park is closed and gated outside of daylight hours.

23.2.14 Vehicular access is available off Glamis Road, near the junction with The Highway. There is another existing vehicle access in the southwestern corner of the park, which is used to access a park maintenance storage area via the southern end of the multipurpose sports pitches.

23.2.15 The foreshore in front of the park is accessible at low tide from a set of steps in Shadwell Basin.

**Highways**

23.2.16 The Highway (A1023) forms part of the Transport for London Road Network and provides two lanes in each direction. It carries high levels of traffic and is subject to a 30mph speed limit.

23.2.17 Glamis Road is subject to a 20mph speed limit and a 7.5 tonne weight restriction.

23.2.18 The four-arm junction between The Highway and Glamis Road is signalised.

**Car parking**

23.2.19 There are five on-street car parking bays on the western side of Glamis Road, which are subject to a Controlled Parking Zone. There are 31 shared-use and four residential on-street bays on the adjacent Wapping Wall, which is also a Controlled Parking Zone. During off-peak hours, parking is permitted in designated bays along The Highway.

23.2.20 There is a single coach parking bay on Glamis Road, which is operational between 8.30am and 5.30pm with a maximum permitted stay of four hours.

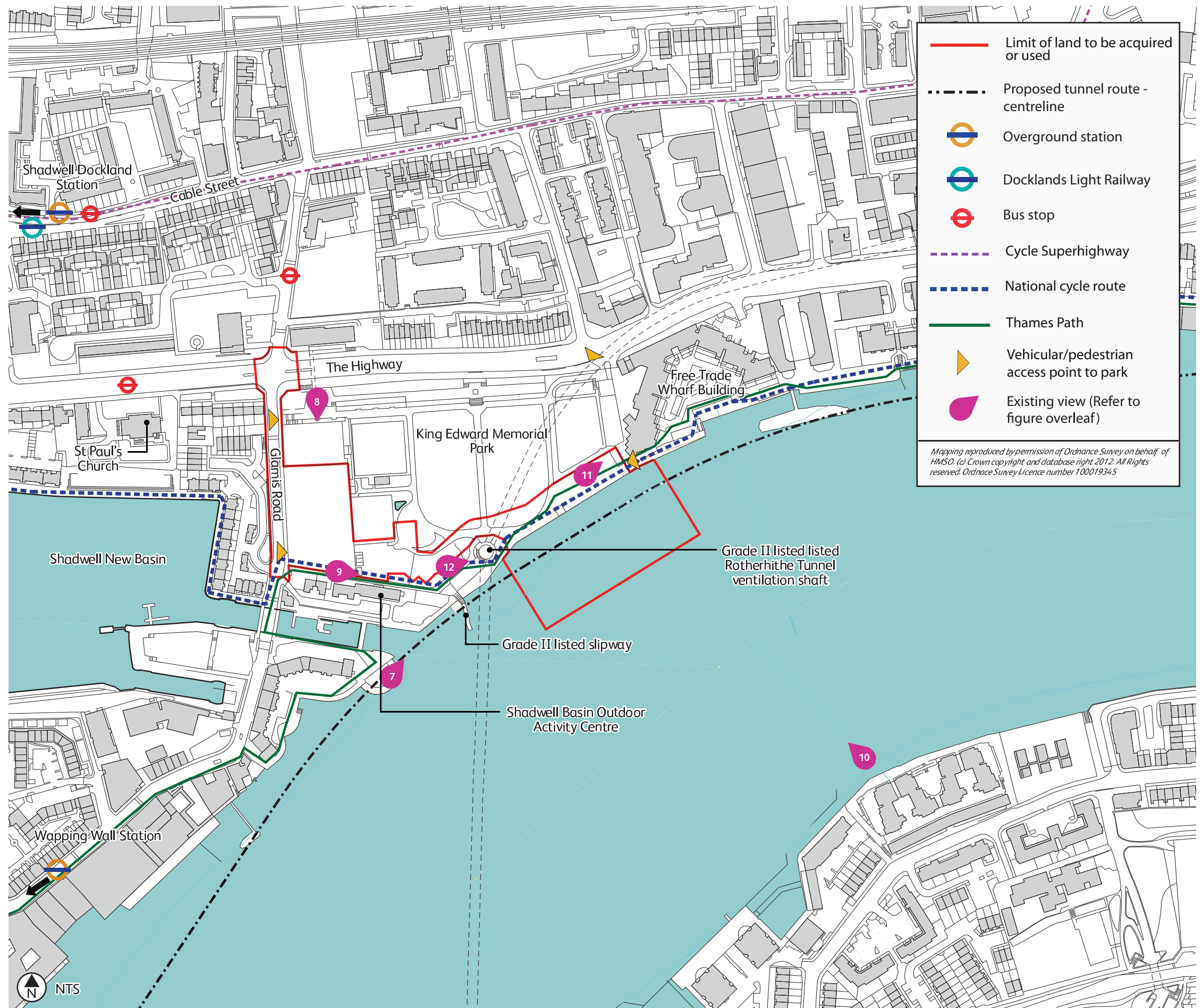


Figure 23.9: Existing site analysis



Figure 23.10: View of foreshore



Figure 23.13: View across sports pitches

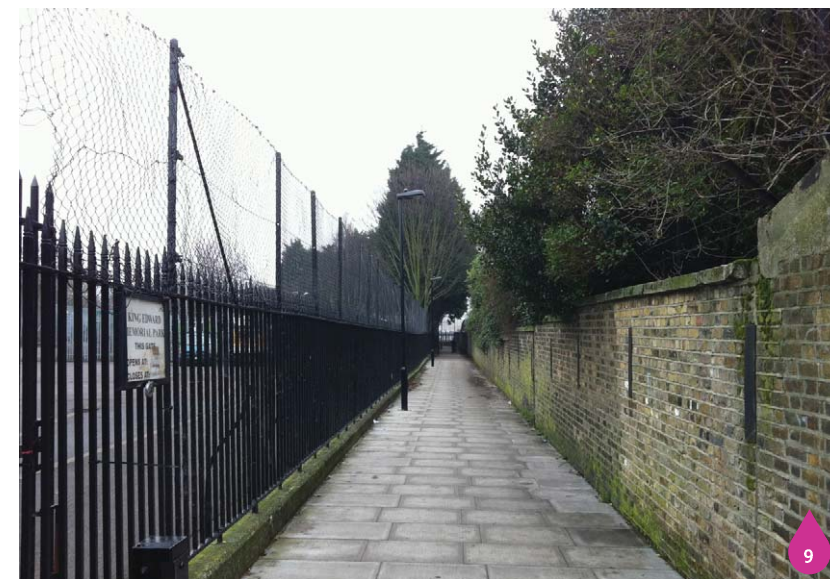


Figure 23.11: View along current Thames Path alignment from Glamis Road



Figure 23.14: View of KEMP from across the River Thames



Figure 23.12: View from King Edward Memorial Park



Figure 23.15: View of Rotherhithe ventilation shaft

### Public transport

23.2.21 The nearest National Rail station is at Limehouse, 1km to the northeast of the site, which is also served by the Docklands Light Railway. The closest London Overground station is Wapping Rail Station, which is located approximately 650m to the southwest of the site.

23.2.22 Shadwell Docklands Light Railway Station is located approximately 700m to the northwest of the site, which is also served by the London Overground.

23.2.23 There are a number of bus stops within 640m of the site, which are located on Commercial Road (A13), Cable Street, and Glamis Road. The stops serve seven daytime bus routes and two night bus routes.

### Cycle routes

23.2.24 The main cycle route in the area is the National Cycle Network Route 13, a national route that starts at Tower Bridge, passes through Hackney to the River Thames and then turns eastwards into Essex, Suffolk and Norfolk. The route runs approximately 270m to the north of the site along Cable Street.

23.2.25 The closest Cycle Superhighway is CS3, which connects Tower Gateway to Barking and passes along Cable Street to the north of The Highway.

23.2.26 A designated London Cycle Route runs north-south along Glamis Road and continues east-west along Cable Street.

### Pedestrian routes

23.2.27 The Thames Path provides a continuous east-west link for pedestrians along the northern bank of the River Thames. The route is diverted via The Highway and Glamis Road when King Edward Memorial Park is closed.

23.2.28 There are a number of pedestrian paths within the park that link the entrance points to the riverside footpath.

23.2.29 Footways are provided on both sides of The Highway and Glamis Road.



### Historical context

23.2.30 During the prehistoric period (700,000 BC to AD 43), the site lay within a stretch of intertidal marshland that probably flooded frequently to the south of an area of high ground.

23.2.31 During the Roman period (AD 43 to 410), the site lay approximately 1.8km to the east of the Roman City of London and approximately 650m to the southeast of a settlement in Shadwell. The gravel terrace near the northern edge of the site may have been used for agriculture. An east-west Roman road is thought to have followed the present-day line of The Highway and several cemeteries have been excavated on the southern side of the road, approximately 750m to the northwest of the site.

23.2.32 During the early medieval period (AD 410 to 1066), the site lay within the intertidal Wapping marsh. It was still prone to flooding and was unsuitable for occupation. The marsh may have been exploited for its natural resources and a range of activities including grazing and fishing.

23.2.33 By the later medieval period (AD 1066 to 1485), the site lay to the east of the small Shadwell settlement, which now featured a series of shipyards. The marshland was gradually drained and reclaimed, the river walls were erected and buildings were constructed along the riverfront. In the early 17th century, Stow described the area and the adjacent riverfront as "a continual street [...] with alleys of small tenements".

23.2.34 Shadwell Market sat on the northwestern part of the site from the 17th century until the mid-19th century. Maps from the 18th and 19th centuries indicate that the western and northwestern parts of the site also comprised housing and industrial buildings, and that the eastern part was occupied by wharves, warehouses, and timber and coal yards. By the mid-19th century, the Thames (Rotherhithe) Tunnel had been completed and the Shadwell Old Basin had been constructed as part of the London Docks.

23.2.35 Planning of the King Edward Memorial Park began in 1910; however, it was not opened to the public until 1922. The North East Storm Relief Sewer outlet was incorporated into the Embankment wall during the 1920s.

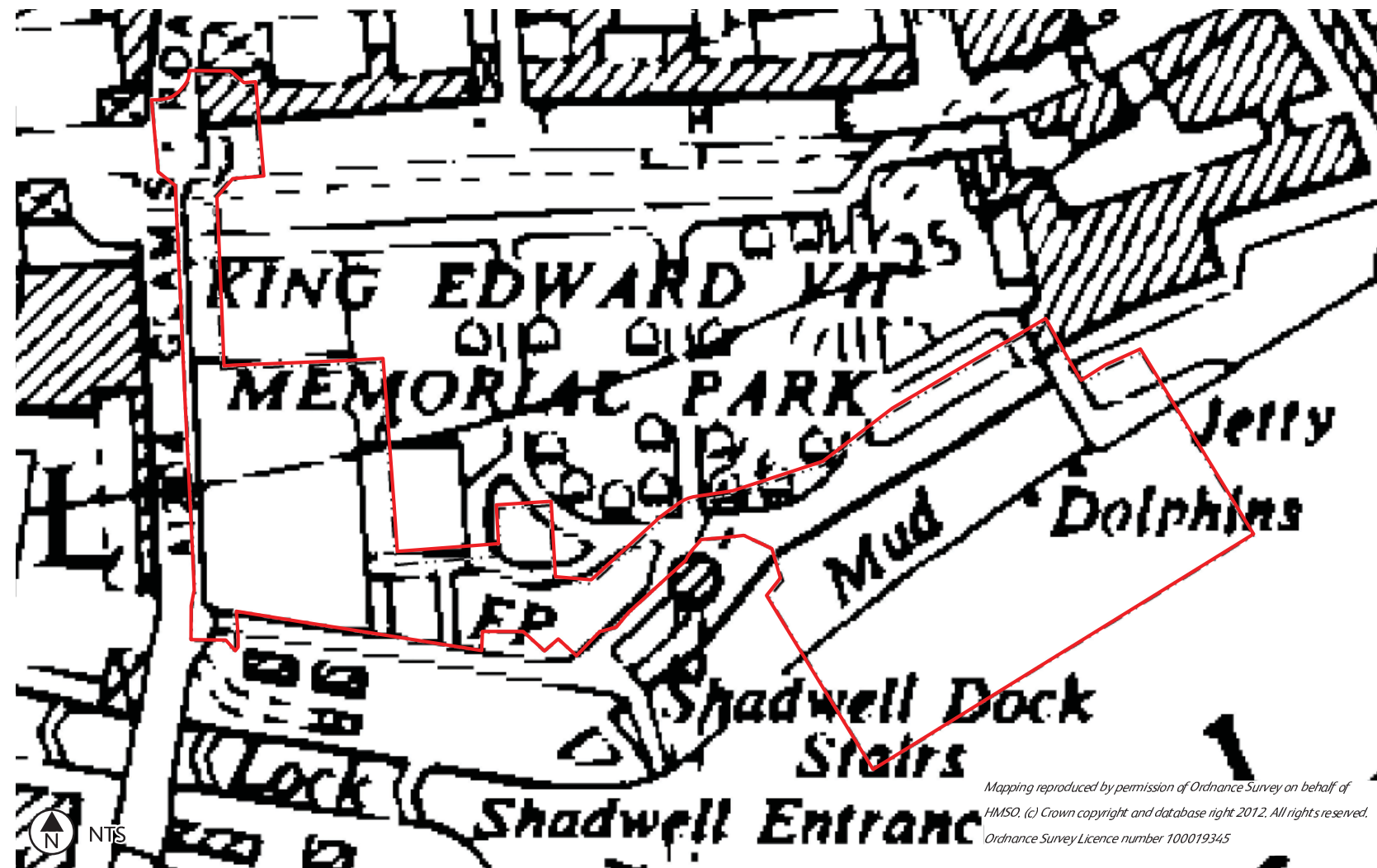


Figure 23.16: Historic map (1955)

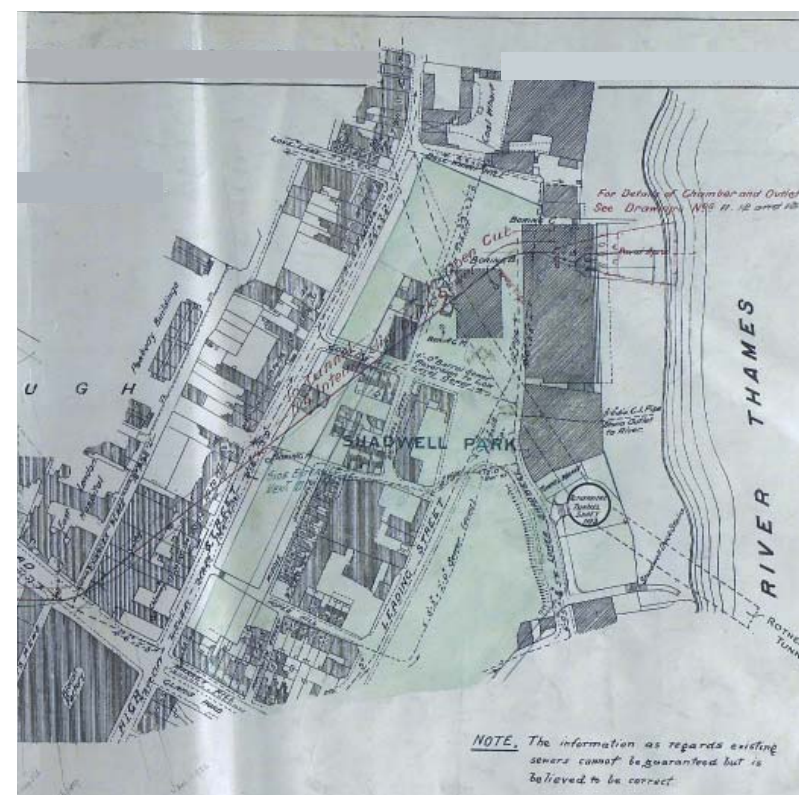


Figure 23.17: Plan of the park prior to construction of the northeast storm relief sewer - circa 1920 (not to scale)

**Site analysis: Opportunities and constraints**

**The site-specific design opportunities included:**

- a. Return the site to public use following construction works and improve the public realm.
- b. Create a permanent beneficial addition to the park in the form of the foreshore structure.
- c. Improve the quality and usability of the Thames Path.
- d. Improve the relationship between the site and its historic surroundings, including nearby listed structures and the Wapping Wall Conservation Area.

**The site-specific design constraints included:**

- a. The alignment of the North East Storm Relief CSO runs under the park.
- b. The Bell Wharf CSO and Cole Stairs CSO do not need to be intercepted but must continue to function during and following construction.
- c. The shaft must be located to optimise the alignment of the main tunnel.
- d. The Grade II listed Rotherhithe Tunnel ventilation shaft building lies in close proximity to the site.
- e. Works must not impact on the Rotherhithe Tunnel. The alignment of the tunnel must also be considered.
- f. The site is located partly in the foreshore of the River Thames and partly in a public park.
- g. The site falls within the Wapping Wall Conservation Area.
- h. The foreshore is designated as a Site of Importance for Nature Conservation (Metropolitan Importance).

23.2.38 Environment Agency policy seeks to minimise encroachment into the river. The project structures must minimise any impact on river flows and reduce the potential for scour. The project structures must also be protected from vessel impacts.

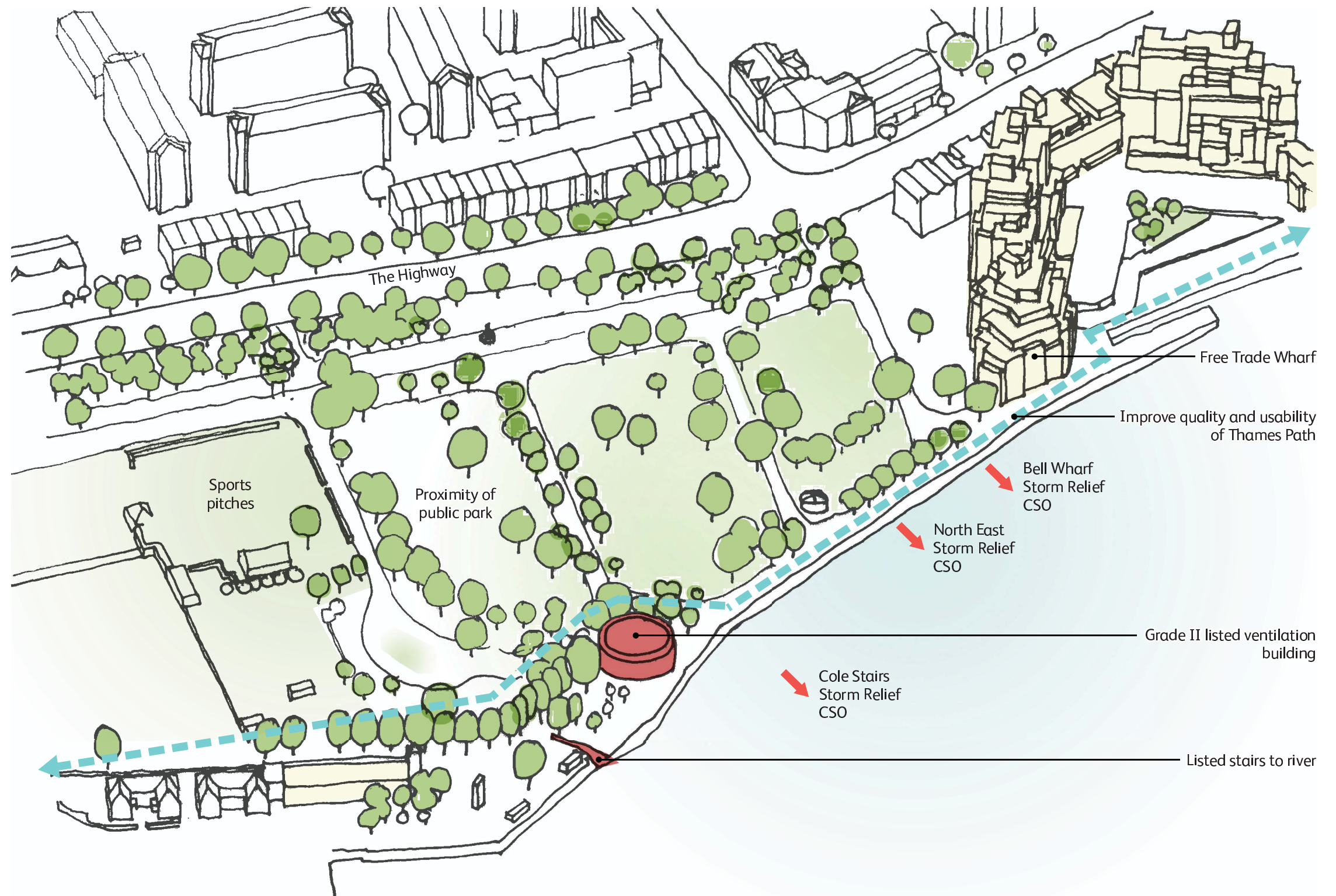


Figure 23.18: Existing site opportunities and constraints sketch

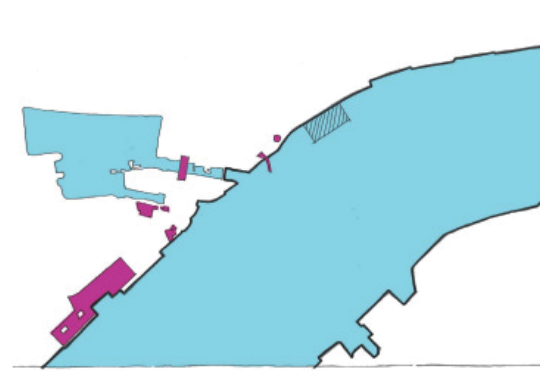
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### 23.3 Design evolution and alternatives

23.3.1 As the majority of the infrastructure for the project would be below ground, the key design objective for the permanent above-ground works was to integrate the functional components into the surroundings. The site-specific design objective at King Edward Memorial Park Foreshore was to successfully integrate the works into an existing area of public realm and to improve that area. We also sought to refine the design and the construction layout and programme to minimise impacts on local residents, the park and park users.

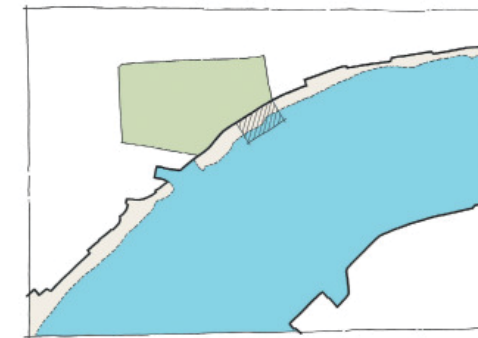
23.3.2 The design of our proposals at King Edward Memorial Park Foreshore was also influenced by an extensive process of stakeholder engagement and design review. In order to ensure design quality, we undertook two rounds of review hosted by the Design Council CABE. We also held various pre-application meetings with the London Borough of Tower Hamlets and other strategic stakeholders such as English Heritage. More information on our public consultation process is provided in the *Consultation Report*, which accompanies the application.

OPTION 1 - ANALYSIS



WATERFRONT CHARACTER: HISTORIC

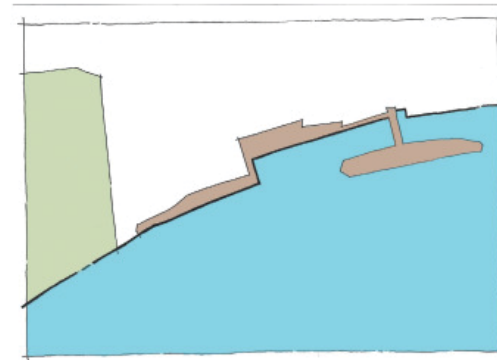
Wapping Wall Conservation Area  
Docklands / Maritime character



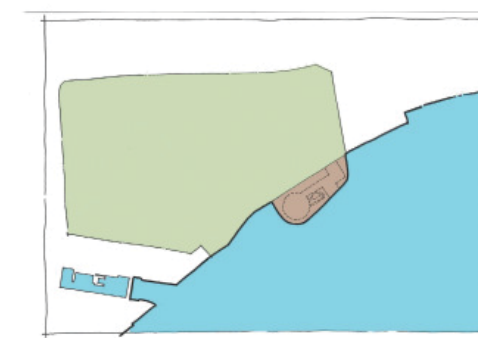
ECOLOGY

Impact on the terrestrial ecology within the park will be minimum.

Foreshore ecology is characterised by invertebrate communities. Wading birds and fish feed on the invertebrates.



WATERFRONT CHARACTER: RIVER STRUCTURES



SHAFT

Minimum site required for new shaft and associated engineering structures.

Figure 23.19: Design development diagram

October 2010

## Phase one consultation

23.3.3 At phase one consultation, we presented King Edward Memorial Park Foreshore as our preferred site to connect the North East Storm Relief CSO to the main tunnel.

23.3.4 At this stage, the design included various below-ground structures, which we proposed to house in a permanent foreshore extension into the River Thames, which would serve as a new area of public realm. We proposed to include a 15m high ventilation column, a 10m high building to ventilate and filter air in the tunnel system, and a smaller free-standing ventilation structure. We proposed to include intertidal terraces on the upstream side of the foreshore structure. Access was proposed via The Highway.

23.3.5 We held drop-in sessions on 18 to 20 October 2010 and on 19 November 2010 at the John Scurr Community Centre to inform the local community of the potential use of the site. We also gathered views on local issues that we have taken into account in developing our proposals.

23.3.6 The largely favourable comments received from the council in its formal response included the need for a review of the access route alignment and the need to maintain access along the Thames Path. The council also welcomed the opportunity to create additional open space. It requested to be closely involved in developing the design/massing of the foreshore structure and determining the location of any prominent features on the site. These comments were later withdrawn.

23.3.7 Changes to the project-wide air management strategy following phase one consultation enabled us to eliminate the need for a ventilation building at this site and reduce the size of the proposed ventilation structures.



Figure 23.20: Proposed view from phase one consultation

## Design development

23.3.8 We endeavoured to continue design-related discussions with the London Borough of Tower Hamlets; however, following phase one consultation, the council officers were instructed by their members not to discuss the proposals for King Edward Memorial Park Foreshore further with the project team.

23.3.9 We therefore considered a number of design options, which we shared with the council and the local community and other stakeholders. However, no further design discussions took place.

23.3.10 We then explored the following design considerations:

- We considered the need to minimise encroachment into the foreshore during construction and operations: we explored a number of alternative shapes for the foreshore structure but the need to limit encroachment into the foreshore became our overriding concern. We omitted the intertidal terraces and reduced the overall footprint of the permanent works.
- We considered an alternative access to the site through the park from Glamis Road rather than off The Highway adjacent to Free Trade Wharf.
- We considered the need to minimise construction impacts on the local community and the park: we sought to permanently relocate the children's play area and reconfigure the sports pitches.
- We considered the possibility of relocating the bandstand onto the foreshore structure rather than reinstating it in its current position.
- We considered the possibility of erecting an elevated walkway with a viewing platform.

May 2011

## CABE sketch review

23.3.11 We held a sketch review based on an initial site assessment and sketched ideas for the site in April 2011. We set out the specific engineering constraints for this site. The proposed alternative access from Glamis Road would provide an opportunity to improve the Thames Path in the southwestern corner of the park. Currently, this section of the path is a narrow alleyway between the Shadwell Basin Outdoor Activity Centre, the multipurpose sports pitches and the Trees for Cities maintenance depot.

23.3.12 We further developed the size and shape of the foreshore structure and presented options for the configuration of the above-ground structures. Our proposals suggested including a continental-style promenade along the river frontage comprising mainly hardstanding.

23.3.13 We also used the opportunity to test the desirability of certain other amendments to the rest of the park. We proposed additional tree planting in the avenue of trees that leads up to the King Edward memorial where trees have been lost. We also explored the possibility of a combining the existing sports pitch with the tennis courts to provide a full size sports pitch. However, it was not possible to develop these ideas without the agreement of or discussions with the London Borough of Tower Hamlets as they involved land outside of our proposed site. The Design Council CABE panel recommended reconsidering the shape of the foreshore structure. It suggested that a more linear form would relate better to the embankment and the park, possibly in conjunction with a boardwalk. The panel was not convinced of the value of a large structure and was unsure how such an extensive space would be used.

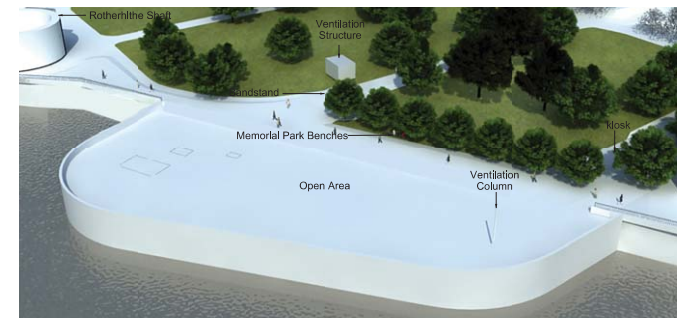


Figure 23.21: Proposed view from Design Council CABE sketch review



Figure 23.22: Proposed view from Design Council CABE sketch review

23.3.14 The panel noted that it was important to understand how the park is used by the community before finalising the design. For the proposals to succeed, the design team must involve local people and demonstrate a compelling vision of the future of the park.

23.3.15 Following the sketch review, we explored a number of design considerations including:

- We considered optimising the footprints of the permanent works and the foreshore structure. This included repositioning the CSO drop shaft closer to the line of the existing river wall and introducing cantilevered areas of public realm on the upstream and downstream sides of the foreshore structure that would smoothly blend the shape of the structure into the park without increasing encroachment in the river.
- We considered removing the existing *Leylandii* trees as part of our Thames Path improvement works to improve views of the river from the western entrance and enhance biodiversity.
- We considered extending the existing grassed lawn areas and paths of the park onto the foreshore structure to respect and enhance the park's current layout. Further, we sought to include areas of tree planting to the upstream and downstream ends of the structure.



Figure 23.23: Proposed view from Design Council CABE sketch review

June 2011

## CABE scheme review

23.3.16 A more detailed review was held prior to phase two consultation on 30 June 2011 at which we responded to previous comments and stakeholder feedback. We had made a number of key changes to the design of the engineering components:

- We further reduced the size of the proposed above-ground structures due to modifications to the project-wide air management strategy.
- We relocated the electrical and control kiosk to the eastern perimeter of the park to make it less visible.
- We incorporated an activity trail alongside the Thames Path improvement works to encourage fitness and promote the use of the park as a popular running route.



Figure 23.24: Proposed view from Design Council CABE scheme review

23.3.17 We proposed to carry out landscaping works around the Rotherhithe Tunnel ventilation building and to relocate various memorial benches and the children's play area in advance of the main works. We also set out possible materials and finishes.

23.3.18 The Design Council CABE panel stated that the plans were moving in the right direction but that a stronger, more ambitious vision was required. The panel approved of the advance permanent works, which would help to address the inevitable inconvenience caused by the construction works.

23.3.19 The panel highlighted the need for a stronger relationship between the park and river in the design. It also requested the design team to address the inlet, or 'pinch point' between the Rotherhithe Tunnel ventilation building and the re-shaped foreshore structure. Finally, the panel gave some advice on the quality of the proposed materials.

23.3.20 Following the scheme review, we explored a number of design considerations including:

- introducing a running track, outdoor gym and zones for various activities into the landscaping proposals
- potentially placing canopies over the ventilation structures on the foreshore structure
- providing steps from the foreshore structure down to the river.

February 2012

## Phase two consultation

23.3.21 Key changes between phase one and phase two consultation in response to the design reviews and stakeholder engagement included:

- We extended the areas of grass and planting on the foreshore structure to make it as green as possible and better integrate it with the park, while accommodating Thames Water's maintenance requirements.
- We confirmed the vehicular access via Glamis Road and restricted use to maintenance vehicles only.
- We proposed to implement advance landscaping around the Rotherhithe Tunnel ventilation shaft.
- We confirmed our proposal to plant additional trees and relocate memorial benches along the avenue of trees between the King Edward Memorial and the river.
- We proposed to relocate the children's play area as part of the advance permanent works.
- We proposed to consolidate and reconfigure the multipurpose sports pitches as part of the advance permanent works.

23.3.22 At phase two consultation we held drop-in sessions on 23, 24 and 26 November 2011 at the Glamis Estate Tenants' Hall, and on 18 to 20 January 2012 at the John Orwell Sports Centre. We informed the local community of the potential use of the site and gathered views on local issues that we should take account of in developing our proposals.

23.3.23 The key issues raised in respect of design included:

- a feeling that the designs were ugly, bland and not in keeping with the character and appearance of the local area
- support for the creation of a new area of public open space in the foreshore
- suggestions to provide lighting along the Thames Path, which currently closes overnight, and to keep the path open later in the winter

d. suggestions to reduce the areas of hardstanding and to ensure that surface finishes are appropriate and enhance the design

e. concerns regarding the size and effects of the permanent buildings and structures

f. general support for the proposals for the permanent layout and design of the site, which would enhance the park and the local area and provide some public benefit.

23.3.24 Comments from the London Borough of Tower Hamlets included:

- The foreshore structure would be very visible from the park and the residential developments to the northeast. The legacy would change the shape of the park and the Thames Path.
- It is unclear from the images which trees are existing and which are proposed. It may prove difficult to establish trees on the foreshore structure.
- There is a lack of sensitivity to the surface detailing around the base of the Rotherhithe Tunnel ventilation shaft.
- The proposals should make specific reference to the historic environment of the park as a whole.
- The new sheer concrete river wall may have an unacceptable impact on views of the park from the south, visibility between the listed structures, and the overall appearance of the area.



Figure 23.25: Proposed plan from phase two consultation

July 2012

## Section 48 publicity

f. The proposals should respect the established character of the park and the late Edwardian Beaux Arts design and layout.

g. The surface finishes may not be appropriate.

h. The proposals could potentially improve the park by developing a playful landscape with natural play elements throughout the park and by upgrading the play area.

i. The view of the River Thames could be optimised with improved surfacing and less visually-intrusive railings.

j. The proposals could potentially provide an outdoor gym and invest in other sports surfaces.

k. The relocated bandstand could potentially provide a storage area for seating. It should be accessible to people with disabilities.

l. There is an opportunity to incorporate public art or interpretative material regarding the project on the structures.

m. The design team should consider providing a jetty to improve landing availability along this stretch of the River Thames.

23.3.25 The Design Council CABE echoed its comments from the scheme review.

23.3.26 Following phase two consultation, we sought to liaise with the London Borough of Tower Hamlets to develop design principles for the site. However, the council strongly objects to the use of the site and once again the council officers were instructed by the members not to hold any further discussions with us on this site. Notwithstanding this, we proceeded to develop our designs and design principles in response to comments from public consultation and stakeholder engagement.

23.3.27 It was not possible to further explore the council's suggestion to include a jetty for river boat services.

23.3.28 In response to the phase two consultation feedback, we further modified the landscape design for the foreshore structure to create a more playful landscape with a circular motif based on the footprint of the Rotherhithe Tunnel ventilation shaft.

23.3.29 We withdrew our proposal to remove the Leylandii trees as part of our Thames Path improvement works, which had proved unpopular with local residents. In order to reduce the amount of works in the park we reduced our re-landscaping proposals for the area around the Rotherhithe Tunnel ventilation shaft building and along the existing Thames Path route.

23.3.30 There were no further significant design developments at this site following Section 48 publicity.



Figure 23.26: Proposed view from Section 48 publicity

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### 23.4 Proposed design

23.4.1 This section describes the amount, layout and scale of the proposed development and how the functional components would be integrated into the existing site. Details of the proposed landscaping and appearance of the site are also embedded in the description where relevant.

#### Fixed principles

23.4.2 The Site works parameter plan defines the zones in which the proposed works would take place. The plan indicates the general location of the CSO drop shaft, ventilation structures, electrical and control kiosk and local control pillar.

23.4.3 The site-specific design principles are included in the *Design Principles* document which accompanies this application. These principles establish the parameters for the above ground structures and landscaping on the site and have, where possible, been developed in consultation with the local authority. The site-specific principles should be read in conjunction with the project-wide design principles.

23.4.4 The design for this site was developed according to assumptions based on comments made by the local community and the London Borough of Tower Hamlets – the key stakeholder. We sought to address the concerns raised. However, the main concern was that King Edward Memorial Park Foreshore should not be a proposed site. In order to allow as much flexibility as possible in the design, the design for the application is for illustrative purposes only. It demonstrates one way in which the project structures could be configured and integrated into the park on completion of the works.

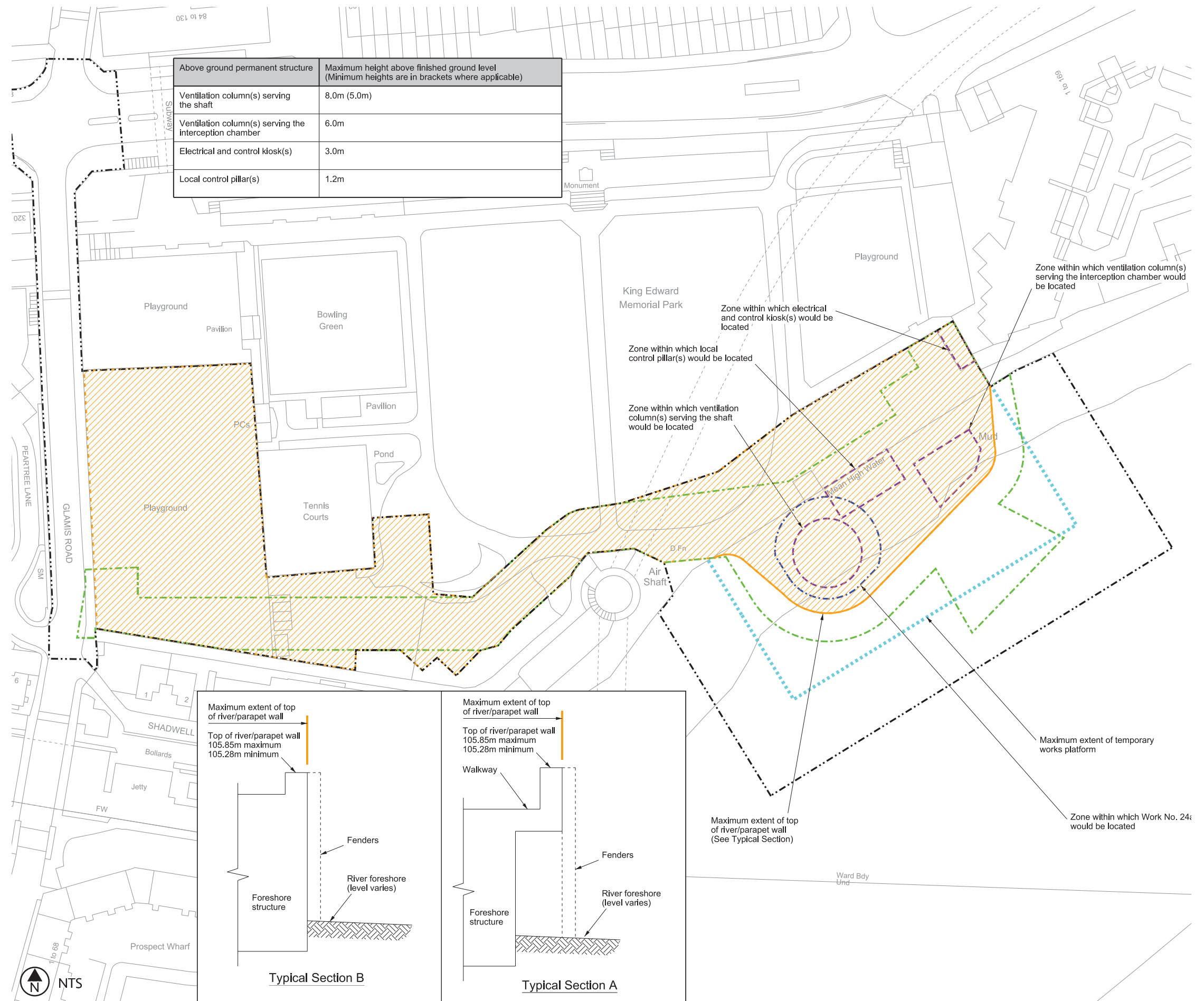


Figure 23.27: Site works parameter plan and sections - refer to Site works parameter plan in the *Book of Plans*

## Design objectives

23.4.5 The proposed foreshore structure would create new land, which would be used as an area of public realm. The main driver behind the development of the illustrative designs was to explore ways in which the structures could fit in with and contribute positively to their riparian environment, having regard to *Core Strategy Policy SP12*, which seeks to improve, enhance and develop a network of sustainable, connected, well-designed places. In addition, we sought to align with the objectives of a number of saved London Borough of Tower Hamlets Unitary Development Plan policies relating to design (Policy DEV1), environmental requirements (DEV2), landscaping (DEV12). Our other objectives included:

- a. Create a new foreshore structure that seamlessly integrates with the park and extends the park into the river.
- b. Create a new area of public realm for sitting and relaxing and informal recreation, from which to enjoy the south-facing aspect and wide open views of the River Thames.
- c. Reinststate the various amenities that would be relocated during construction, including the football pitch, tennis courts, children's play area, bandstand and memorial benches.
- d. Improve pedestrian access through the park by creating a clearly legible east-west route. This includes widening and realigning the Thames Path and introducing an adjacent landscaped fitness/activity zone and new gated entrance at Glamis Road.
- e. Ensure that the new space is well integrated into the wider footpath network in the park and create routes that separate the main pedestrian routes from adjacent amenity spaces.
- f. Create a sense of safety by ensuring high levels of pedestrian footfall and encouraging people to spend time in the park to promote 'natural surveillance' and a sense of ownership.
- g. Create a simple, elegant and clutter-free space with a contemporary approach that respects the original character and integrity of the park including historic features such as the Rotherhithe Tunnel ventilation shaft.
- h. Increase the provision of green space and incorporate as much soft landscaping as possible to provide seasonal interest throughout the year
- i. Enhance the foreshore area and promote aquatic ecology by introducing microhabitats for colonisation by invertebrates.



Figure 23.28: Proposed aerial view

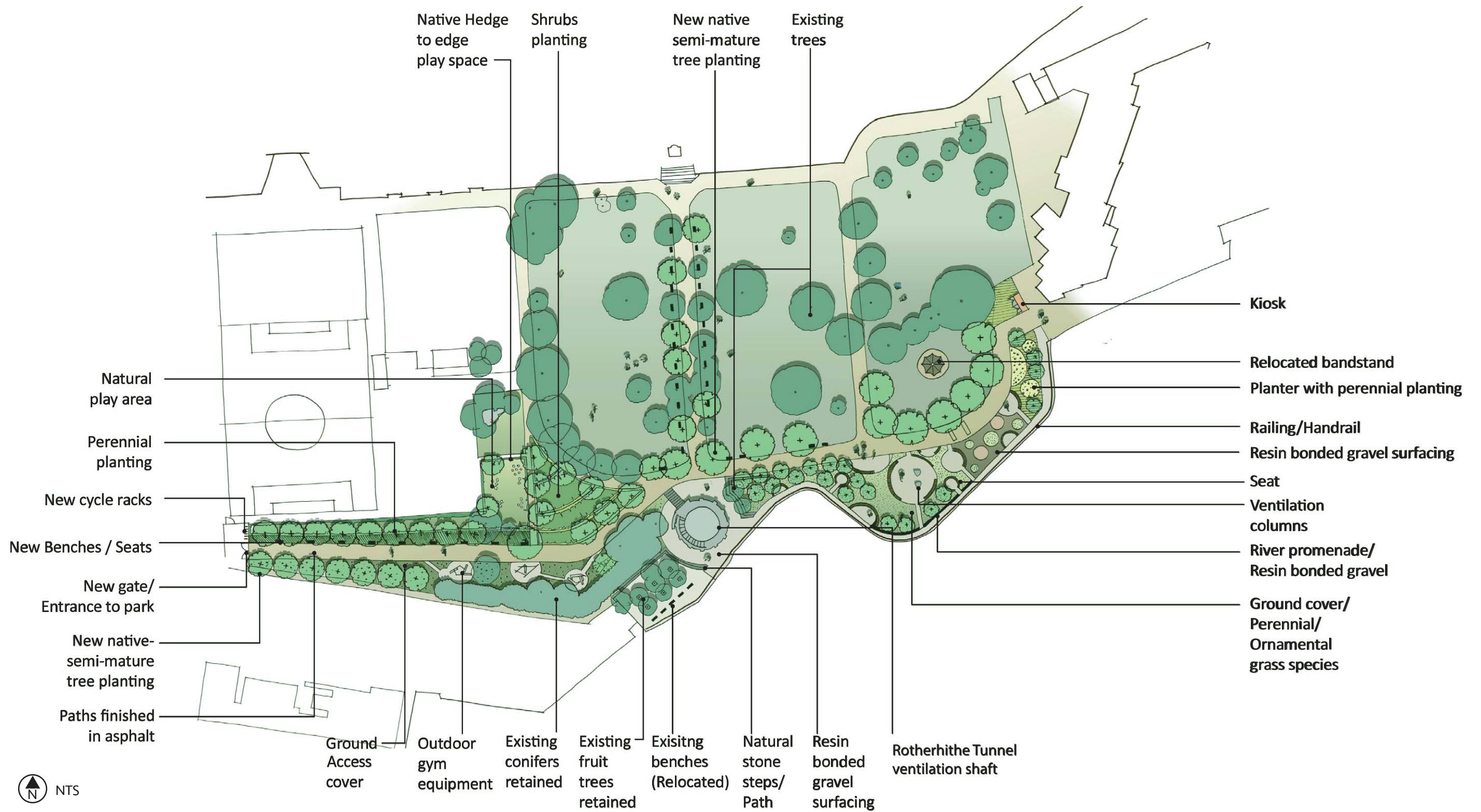


Figure 23.29: Proposed landscape plan

Use and programme

23.4.6 The new area of public realm would form a flexible open space that could accommodate various informal activities. Its position adjacent to the River Thames and the provision of large areas of seating would make it an ideal resting and viewing point away from the main thoroughfare. It would also create a new riverside character area for the park.

23.4.7 Given the south-facing aspect towards the river, we anticipate that a public open space here would be well used and self-policing. The space would be pleasant all year round and accessible to people of all ages.

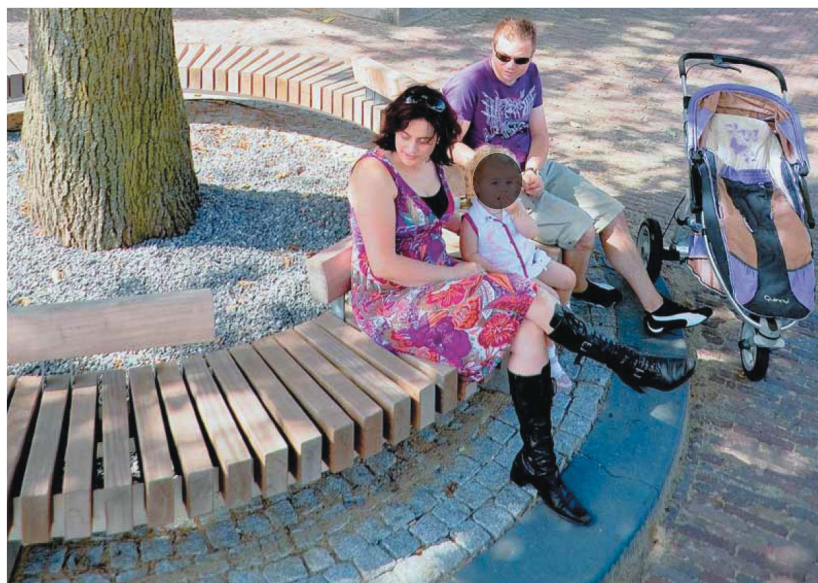


Figure 23.30: Areas for seating and viewing



Figure 23.33: Areas for seating, viewing and planting



Figure 23.31: Areas for seating, viewing and planting



Figure 23.34: Flexible spaces for informal activities



Figure 23.32: Flexible spaces for informal activities



Figure 23.35: Riverside character



Figure 23.36: View of proposed site design from the Free Trade Wharf



Figure 23.37: View of proposed site design looking east from Rotherhithe Tunnel ventilation shaft



Figure 23.38: View of proposed site design from the River Thames

### Detailed description

23.4.8 The main character areas of the illustrative landscape design include the new entrance off Glamis Road, the foreshore structure, the bandstand area, and existing character areas in the park.

### Entrance area

23.4.9 We propose to create a new, more generous entrance area off Glamis Road, which would include new gates and cycle racks. The existing narrow and enclosed path could be replaced with a broader access route and landscape zone flanked by seating, outdoor gym equipment, tree and perennial planting. This would activate the route and encourage natural surveillance. This would, however, be dependent on agreement with the London Borough of Tower Hamlets as the existing path is outside of our site.

### Foreshore structure

23.4.10 The design proposals for the new foreshore structure sought to re-engage the park with the river, by creating a new riverside character area. The foreshore structure would form a pleasant space away from the thoroughfares of the widened east-west access route across the park and the new river promenade.

23.4.11 The design reflects the circular geometry of the Rotherhithe Tunnel ventilation shaft building. We also sought to reconcile the areas of hardstanding required for maintenance purposes while keeping the area as green as possible.

23.4.12 The soft landscaping would create a sense of enclosure and define sheltered seating zones from which to enjoy varied and changing views of the river. We propose to include low perennial planting and would position new tree planting to ensure that these views are unimpeded.

23.4.13 The design respects the existing character and integrity of the park and seeks to respond with a contemporary flavour that also meets the functional requirements.

### Bandstand area

23.4.14 We propose to create a new attractive green setting for the existing bandstand. We sought to enlarge the grassed areas by extending the line of the eastern section of grass and surrounding the bandstand with tree planting and informal seating.

### Existing character areas

23.4.15 The main character areas of the park include the multipurpose sports area, the grassed areas and formal avenues of trees, the wildlife meadow area and the formal terraces.

23.4.16 The football pitch and tennis courts would be reinstated following construction. We propose to provide a new children's play area, which would incorporate a natural play area set within native hedge and shrub planting.

23.4.17 The existing memorial benches could be renovated and reinstated along the main formal axis of the park, subject to any agreement with the London Borough of Tower Hamlets. If this proposal proves unacceptable, we have identified alternative positions for the benches close to their current positions on the northern side of the Thames Path.

23.4.18 We sought to retain as many existing trees within the park as possible. Any trees that would be removed would be replaced with a large species of deciduous tree to ensure adequate mitigation. In addition to replacement trees, we propose to fill existing gaps in the tree planting on the path between the Thames Path and the King Edward Memorial, subject to agreement with the council. This would enhance the original character of the park and enclose the grassed areas and formal terraces.

### Integration of the functional components

24.4.19 The majority of the proposed works are below-ground structures, including:

- a. a CSO drop shaft
- b. a CSO interception chamber
- c. a valve chamber
- d. a connection culvert
- e. CSO overflow structures and a protective foreshore apron
- f. an air treatment chamber
- g. associated hydraulic structures, culverts, pipes and ducts.

24.4.20 Post construction, the following structures would be visible on the site:

- a. the foreshore structure surrounded by a new section of river wall
- b. two signature ventilation columns to serve the CSO drop shaft
- c. one ventilation column to serve the CSO interception chamber
- d. an electrical and control kiosk
- e. a local control pillar.

23.4.21 The CSO drop shaft would be approximately 20m in internal diameter. It would lie within the foreshore of the River Thames in the western half of the new foreshore structure. The CSO interception chamber would sit in the eastern half of the foreshore structure, which would also enclose the air treatment chamber, valve chamber and culverts.

### Ventilation columns

23.4.22 The number and size of the ventilation columns is determined by the air management requirements for the site. At King Edward Memorial Park Foreshore, we propose to include two ventilation columns to serve the CSO drop shaft, which would be 5m to 8m high. The height was increased to

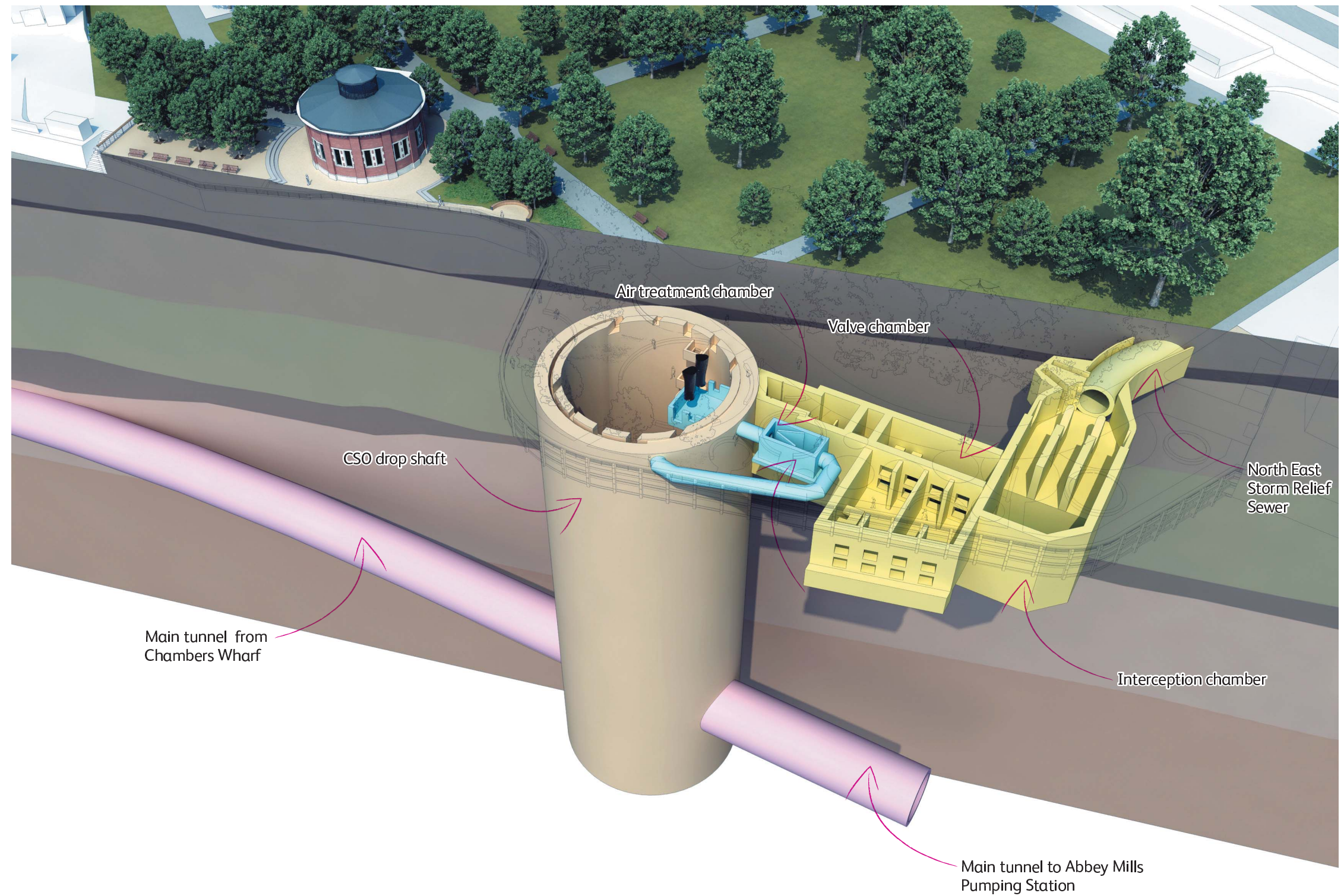


Figure 23.39: Proposed functional components diagram: below ground view



Figure 23.40: Proposed functional components diagram: above ground view

improve the proportions of the columns. We have made provision in the application for the ventilation columns to be increased to a maximum height of 8m in the final design, if it is demonstrated that this improves the appearance. They would sit on the western section of the foreshore structure.

23.4.23 The proposed columns were designed to be fit-for-purpose, but also as an architectural statement. They would feature the 'signature' project design. The columns would be finished with black cast iron to reference other historic cast and wrought iron features in the area.

23.4.24 A smaller diameter ventilation column would be positioned on the eastern part of the foreshore structure. The position of the column is constrained by the location of the interception chamber within the foreshore structure. This column would be a maximum of 6m high and similar to a lamp post in scale. It would be finished to blend in with the local context.

#### Electrical and control kiosk and local control pillar

23.4.25 The electrical and control kiosk would stand approximately 3m high. We propose to locate it on the eastern perimeter of the park near the Free Trade Wharf development instead of on the foreshore structure to make it less visible. Maintenance activities require the kiosk to be visible from the CSO interception chamber, which constrains the zone in which it could be located.

23.4.26 We propose to incorporate a planted brown roof on the kiosk to enhance local biodiversity. Covering the roof with materials such as low nutrient rubble and gravels would promote natural colonisation by brown field plants of particular value to insects and birds.

23.4.27 The local control pillar would stand approximately 1.2m high and would sit on the foreshore structure.



Other works

23.4.28 Areas of hardstanding would be included to facilitate maintenance vehicle access and incorporate access covers to the below-ground infrastructure.

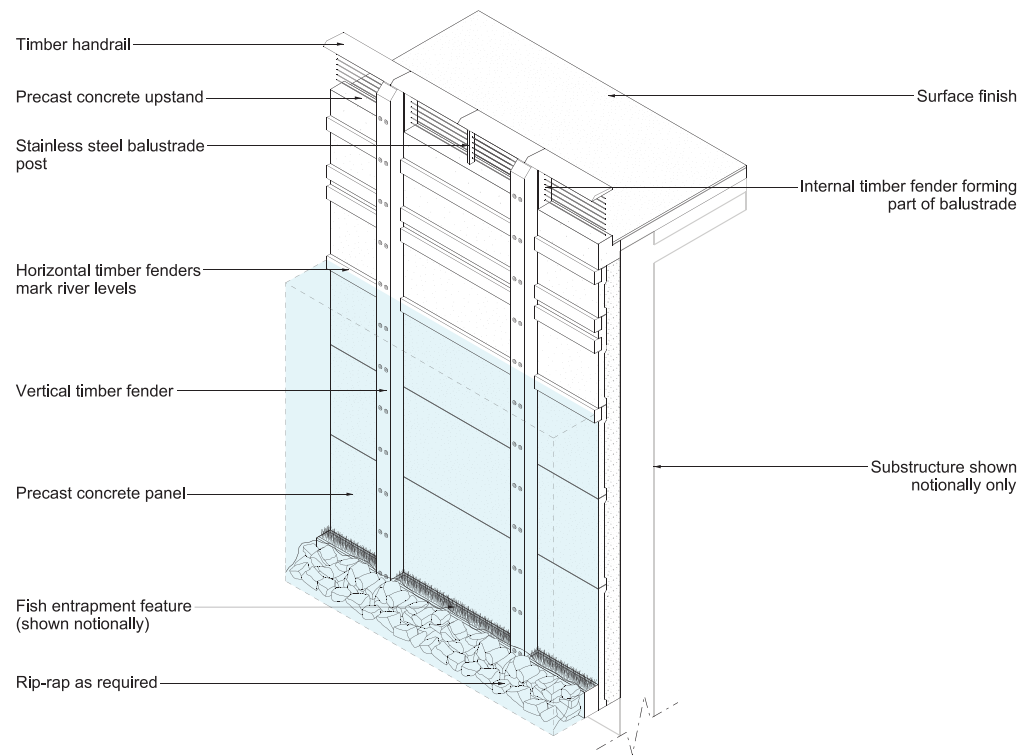
23.4.29 We also propose to create a new permanent access from Glamis Road.

23.4.30 The number, layout and scale of the proposed permanent structures are constrained by the foreshore location and the proximity of the park. The above-ground structures were kept to a minimum in order to avoid interrupting views of the River Thames and to retain the open landscape of the park and riverside.

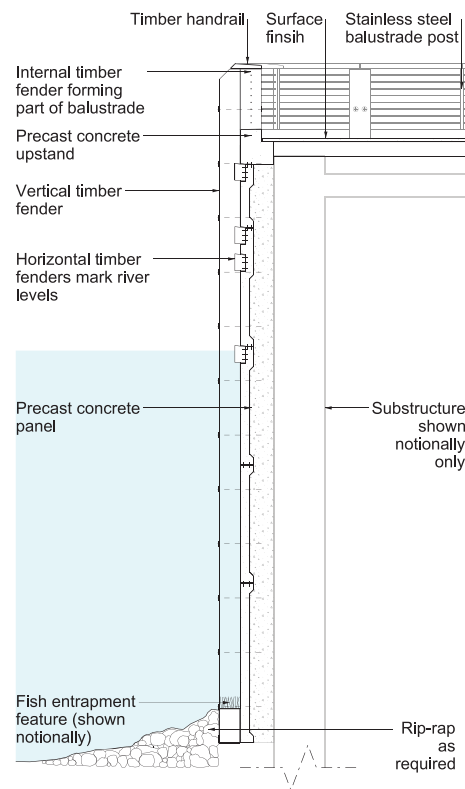
Foreshore structure

23.4.31 We carried out fluvial modelling studies to understand the possible effects of the foreshore structure on the flow in the River Thames. The size and scale of the structure was optimised to reduce encroachment into the foreshore as far as possible, while incorporating the necessary permanent structures. We also endeavoured to minimise any effects on river navigation.

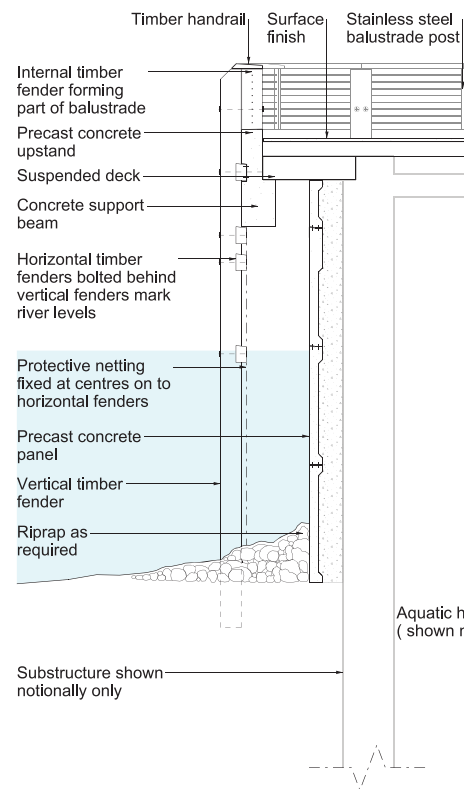
23.4.32 The layout of the hydraulic structures was constrained by the location of the Cole Stairs Storm Relief CSO, which runs beneath the foreshore to the southwest, and the Bell Wharf Storm Relief CSO to the northeast and the clearance required around Rotherhithe Tunnel. These features limited the possible size of the foreshore structure.



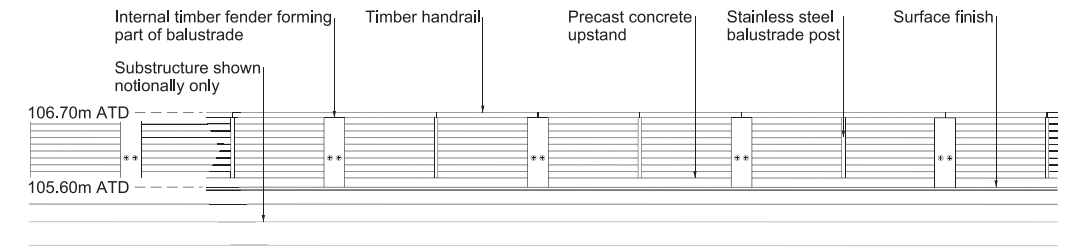
Isometric



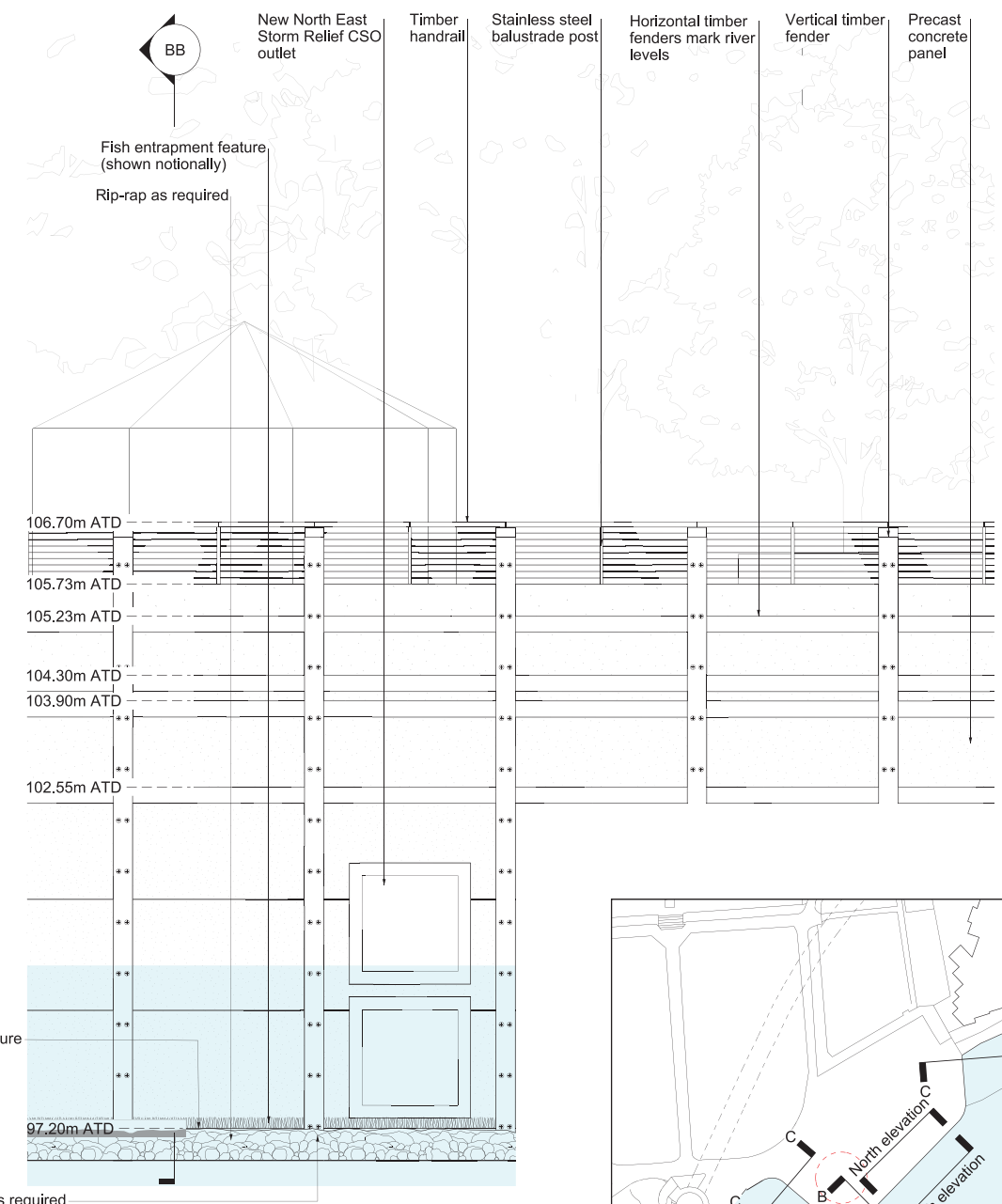
Section BB



Section CC



North elevation



South elevation

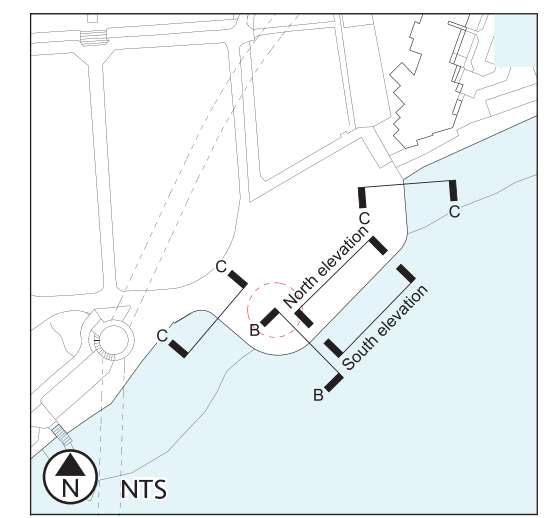


Figure 23.41: Proposed river wall (not to scale) - refer to Typical river wall design intent in the *Book of Plans*



Figure 23.42: Listed stairs and slipway leading down to River Thames -refer to Diagram 23.2 for location



Figure 23.43: Boats moored below the low water line at Shadwell Basin Outdoor Activity Centre



Figure 23.44: Example of 'rip rap scour protection'



Figure 23.45: Example of Aquatic habitat feature

**Navigational Issues**

23.4.33 The foreshore structure would sit approximately 74m outside of the authorised navigation channel in the River Thames. Therefore, we do not expect that the structure would significantly impact on general river navigation for large boats.

23.4.34 The mean low water line lies approximately 30m from the existing river wall and at low tide a large area of the foreshore is exposed. Small boats belonging to the Shadwell Basin Outdoor Activity Centre are moored in the river below the low water line. The boats are accessed via the listed Shadwell Dock Stairs. The foreshore structure could affect the activities of the Shadwell Basin Outdoor Activity Centre; however, we have identified ways to mitigate any potential impact.

23.4.35 Due to the constraints on the shape of the foreshore structure, it was not possible to avoid acute angles with the existing river walls. In order to reduce the risk of small boat users getting caught on these corners, we propose to include a line of horizontal and vertical timber fenders along the line of the cantilever above to soften these angles.

**River walls**

23.4.36 The new section of river wall would form part of the flood defences. It would be finished at 105.73m Above Tunnel Datum to tie in with the existing walls on either side of the structure. This level is approximately 130mm above the ground level of the foreshore structure. This height is above current flood defence levels and satisfies the raised level required in the year 2065 in the Environment Agency's Thames Estuary 2100 strategy. Further, the structural design of the wall enables the defences to be raised further to meet the requirements for the year 2100.

23.4.37 We selected a simple 'wharf-like' treatment for the appearance of the new wall, which would be clearly designed and well-proportioned. The materials would reference the robust and utilitarian history and character of the existing wall.

23.4.38 The new wall would be finished in high quality concrete panels with horizontal timber fenders to mark pertinent tide levels. Vertical timber fenders would be applied to the concrete panels. The fenders would continue above the line of the concrete wall to form part of the handrail design. The handrail would be designed to be comfortable to lean against. The balustrade treatment above the concrete upstand and between the fenders would be kept as open as possible to enable views over the River Thames when seated.

23.4.39 We propose to include an 'aquatic habitat feature' at the base of the new wall. This is a type of timber planter filled with brush, rubble or sediment to provide habitat. It would be located in the intertidal zone between the timber fenders and outside of the area likely to be impacted by ships. Such features have been previously installed within the tidal Thames. The detailed design would be agreed at a later stage.

**CSOs**

23.4.40 The North East Storm Relief CSO would discharge through low level flap valves in the new wall on the infrequent occasion that the tunnel is full.

**Apron and scour protection**

23.4.41 In order to prevent possible erosion of the foreshore, a new apron would be formed in front of the North East Storm Relief CSO using rip-rap beneath a layer of foreshore sediments. Scour protection composed of rip-rap may also be required at the base of the river walls. The maximum extent of the apron is defined on the Site works parameter plan.

## Landscaping and appearance

23.4.42 The proposed illustrative external finishes and landscaping scheme demonstrate how the site could be reinstated following construction. It would also be possible to provide advanced planting outside or within the site prior to construction or during certain phases of construction, subject to agreement with the London Borough of Tower Hamlets.

23.4.43 Therefore, the finishes and landscaping would be the subject of DCO requirements to be approved at a later stage. However, the design principles submitted with the application demonstrate the project's intentions to implement a high quality landscaping scheme.



Figure 23.46: Provide soft landscaping and semi-mature trees



Figure 23.47: Provide soft landscaping and semi-mature trees

## 23.5 Access and movement

23.5.1 Subject to stakeholder support, the new gated access route off Glamis Road could form part of the Thames Path and be accessible to pedestrians and cyclists during park opening hours. The widened entrance would improve pedestrian flow to and from the park. The existing alley would be retained to provide an alternative route along the riverfront. If agreed with the London Borough of Tower Hamlets, this could be enhanced and incorporated into our access route.

23.5.2 The wider new east-west pedestrian route would run across the site and would integrate with the existing network of pedestrian routes within and on either side of the park. The proposed pedestrian routes within the park would be step-free and provide clear lines of sight to ensure that pedestrians and joggers feel comfortable and secure at all times. Circulation onto and around the foreshore structure would be integrated with circulation around the park and along the Thames Path as far as possible.

23.5.3 The site is broadly flat and there are few constraints on designing a space that is accessible to all. In line with project-wide aspirations and good practice, landscaping treatments and materials would ensure that pedestrian routes meet the best standards of accessibility. The proposed works would not alter the existing opening hours or the other access points to the park.

## Thames Water access requirements

23.5.4 Permanent access to the CSO drop shaft, adjacent chambers, electrical and control kiosk and local control pillar would be via the new entrance off Glamis Road and the proposed access path.

23.5.5 Once the project is operational, it is anticipated that Thames Water personnel would visit the site approximately every six months to inspect and carry out maintenance of the electrical and control, ventilation and below-ground equipment. This would likely involve a visit by personnel in a van during normal working hours and may take several hours.

23.5.6 It is anticipated that a major internal inspection of the tunnel system and underground structures would be required once every ten years. This process would likely involve a small team of inspection staff and support crew and two mobile cranes to lower the team into the CSO drop shaft. The inspection would be carried out during normal working hours and would likely take several weeks. In order for this to be carried out it would require the removal of some landscape features and replacement following completion of inspection.

23.5.7 Thames Water may also need to visit the site for unplanned maintenance or repairs, for example, in the event of a blockage or an equipment failure. Such a visit may require the use of mobile cranes and vans.

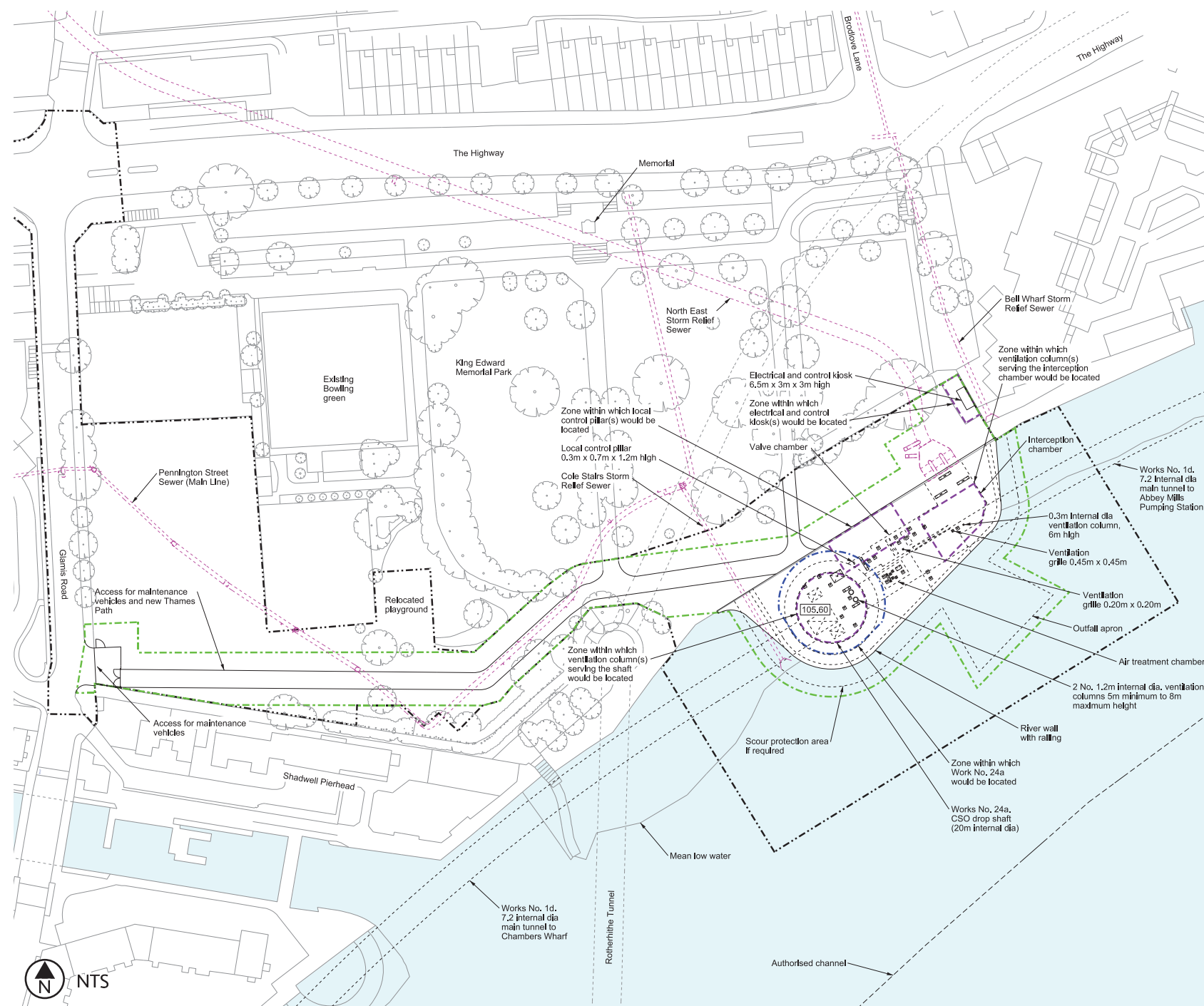


Figure 21.48: Permanent works layout - refer to Permanent works layout in the *Book of Plans*

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