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

Deptford Church Street

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





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Section 25 Deptford Church Street

25.1 Introduction

25.1.1 A worksite is required to connect the Deptford Storm Relief CSO to the Greenwich connection tunnel, which would transfer wastewater flows into the main tunnel. The proposed development site is known as Deptford Church Street, which is located in the London Borough of Lewisham and is also close to the Royal Borough of Greenwich to the north and east.

25.1.2 We have agreed with the London Borough of Lewisham that 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. The scale of the above-ground structures, however, is indicative.



Figure 25.1: Aerial photograph of the existing Deptford Church St site with LLAU indicated $\,$

25.2 Existing site context

- 25.2.1 The site itself is triangular in shape and comprises areas of the Crossfield Open Space (as designated by the London Borough of Lewisham) and highway.
- 25.2.2 A brick wall runs north-south across the site, dividing the grassed space into two separate areas. The eastern side is fenced and gated and is currently used as a dog exercise area and the western side features a low railing fence and is used as an informal area of public open space.
- 25.2.3 The site is designated as part of a Site of Nature Conservation Importance, which also includes the churchyard on the opposite side of Coffey Street, and features a number of mature trees and smaller shrubs. The site also falls within the St Paul's Conservation Area.
- 25.2.4 The site is bounded to the north by Coffey Street, to the east by Deptford Church Street, and to the southwest by Crossfield Street.
- 25.2.5 The Grade I listed St Paul's Church is situated to the north of the site off Coffey Street. The churchyard is designated as open space. There are Grade II listed walls and railings to the north and east of the church and the Grade II listed walls of the former chapel are situated to the southeast of the church. To the north of the church on Albury Street are a number of timber-framed, pre-19th century houses and early 18th century terraced houses.
- 25.2.6 To the northeast lies the Sue Godfrey Nature Reserve, which is separately designated as a Site of Nature Conservation Importance. The reserve forms part of a potential east-west link across Deptford from Deptford High Street to Deptford Creek, as set out in the London Borough of Lewisham's North Lewisham Links Strategy (2007). The nearest residential buildings are the three-storey houses on the corner of Deptford Church Street and Berthon Street.

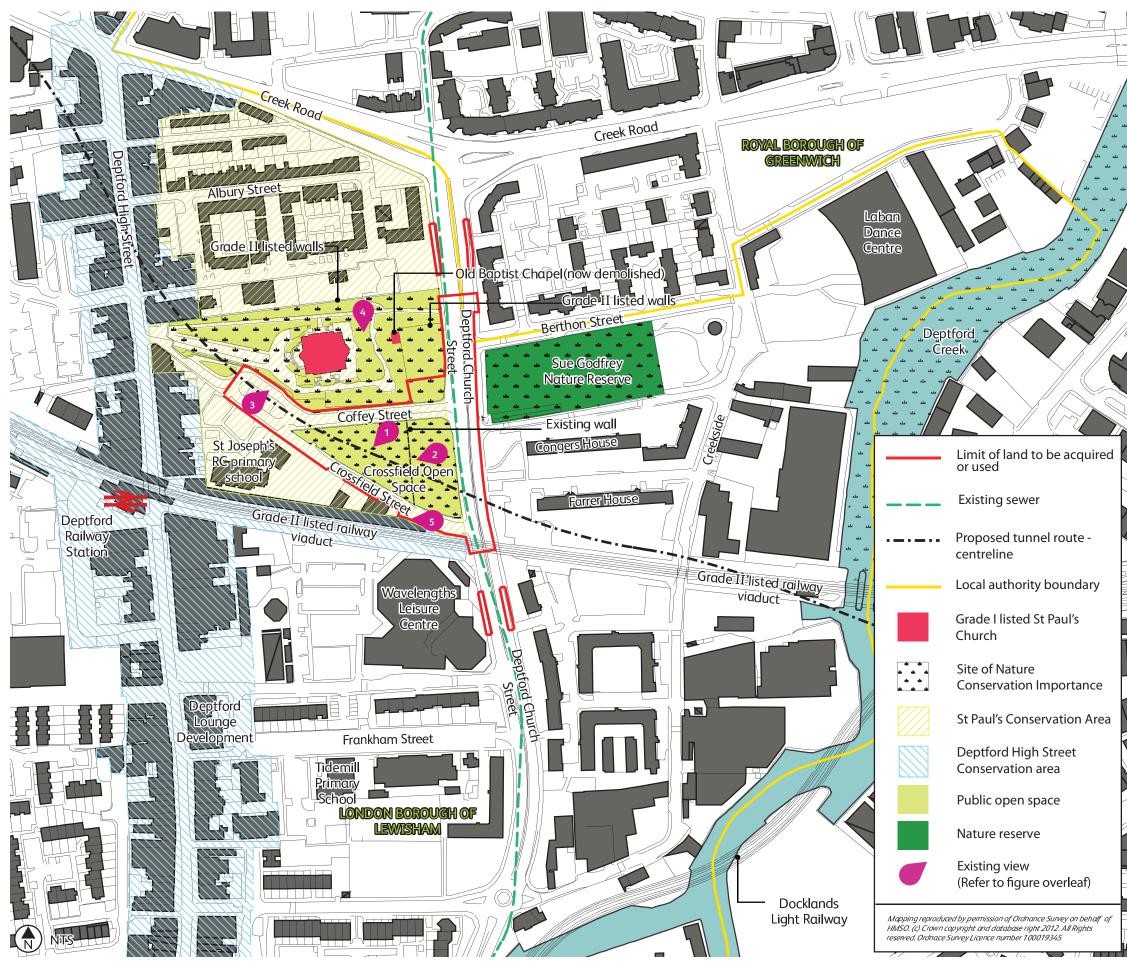


Figure 25.2: Existing site plan



Figure 25.3: View of open area



Figure 25.4: View showing existing wall



Figure 25.5: View of St Paul's Church



Figure 25.6: View within grounds of St Paul's church



Figure 25.7:View of industrial units in viaduct

25.2.7 To the east of the site are the residential apartment buildings of Congers House and Farrer House, which are five storeys high and lie approximately 50m to the east of the site. The industrial area along Deptford Creek further east is characterised by two and three-storey warehouses that range from small units to large-scale sheds. The development pattern here is typical of industrial estates and has small access roads informally arranged around Deptford Creek and the Docklands Light Railway. The Laban Dance Centre is also located in this area.

25.2.8 The pattern of residential development continues to the southeast. To the south of the site lies St Joseph's Roman Catholic Primary School ('St Joseph's') and the Grade II listed railway viaduct. On the far side of the viaduct is the Wavelengths Leisure Centre. The Tidemill Academy and the Deptford Lounge development were also recently completed. The Deptford Lounge development includes Resolution Studios, which is seven storeys high and provides a mixture of affordable housing, studios for local business and an exhibition space.

25.2.9 There have also been public realm improvements to current parking facilities such as Frankham Street, which now provides parking for shoppers. This area has been modified with a shared surface treatment to create a safe and secure environment.

25.2.10 Deptford High Street to the west of the site is a linear band of dense residential three-storey houses and retail terraces. It includes Deptford Railway Station, which has recently undergone improvement works. The arches of the viaduct in this location are currently occupied by a plumbing supplies retailer, a car maintenance business and a recycling centre.

Existing site access and movement

25.2.11 Access to and movement around the open space at the site is limited by a perimeter fence around the eastern end of the site. This fence and the brick wall create a barrier and discourage pedestrian movement across the open space.

Highways

25.2.12 Deptford Church Street (A2209) forms part of the Strategic Road Network and is characterised by relatively high levels of traffic. Coffey Street is a 20mph zone that has a turning area adjacent to St Joseph's. Crossfield Street is a no-through route and is accessible from Deptford Church Street. A hammerhead at the end of the street allows vehicles to turn back towards Deptford Church Street.

Car parking

25.2.13 On-street car parking is available along Coffey Street. There is restricted parking outside St Joseph's at the junction with Crossfield Street and additional parking along Crossfield Street.

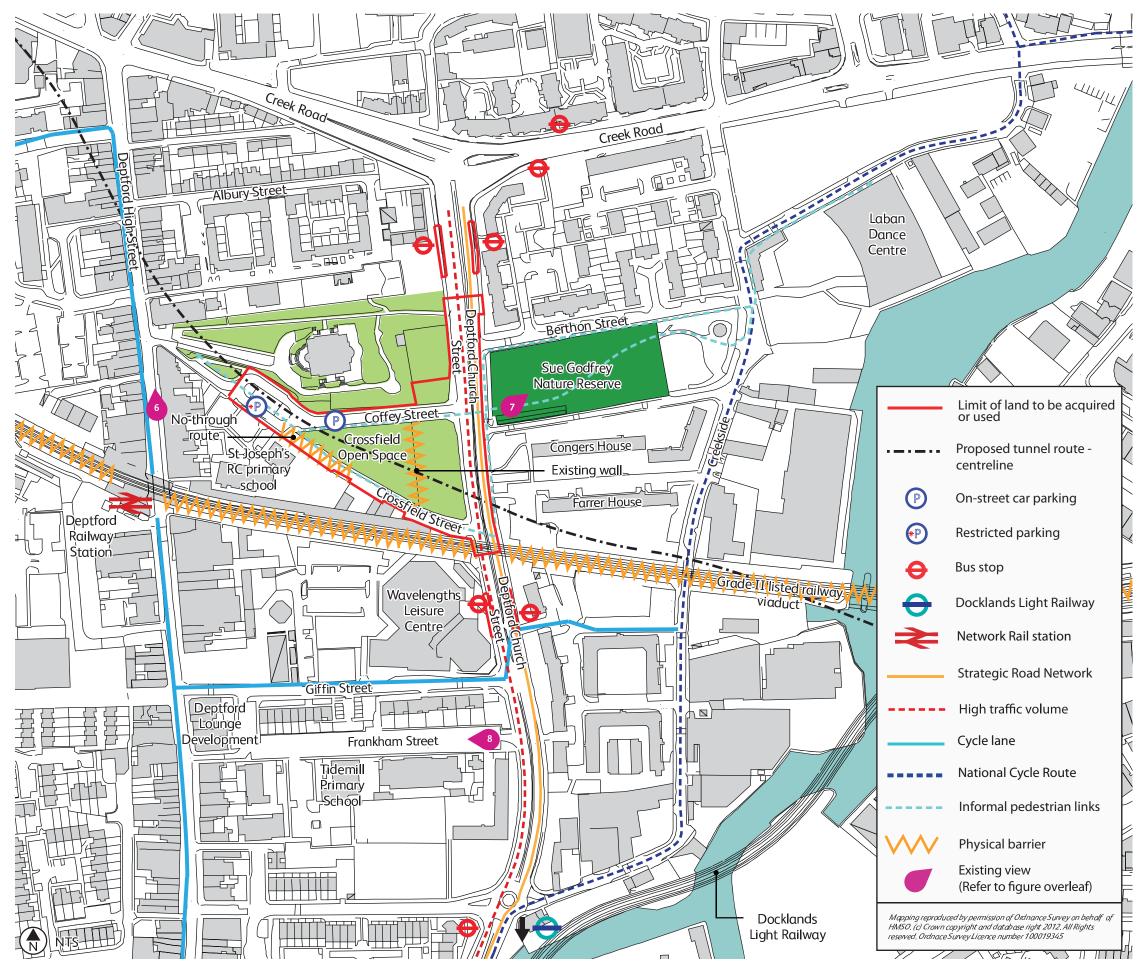
25.2.14 Deptford Church Street features designated bus lanes and double yellow lines; no on-street parking is available.

Public transport

25.2.15 Deptford Railway Station is located approximately 200m to the southwest of the site on Deptford High Street.

25.2.16 Deptford Bridge Docklands Light Railway Station lies approximately 600m to the south of the site.

25.2.17 There are a number of bus stops within 600m of the site, which are located on Deptford Church Street, Creek Road (A200), Deptford Bridge (A2) and Brookmill Road (A2210). The stops serve seven bus routes.



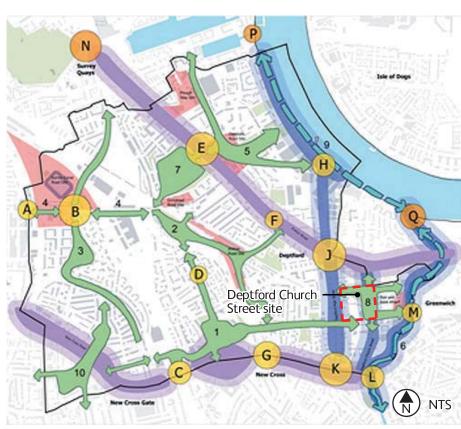


Figure 25.9: Diagram extracted from North Lewisham Links Strategy (2007) with approximate location of site shown in red

Key

- 1. Kender to the Creek
- 2. Central Deptford
- 3. The Western Connection
- 4. Surrey Canal Road
- 5. Towards the river
- 6. Deptford Creek
- 7. Deptford Park
- 8. High Street to Creek
- 9. Riverside
- 10. New Cross Gate improvements



Figure 25.10: View of Deptford High Street



Figure 25.11: View of Sue Godfrey Nature Reserve



Figure 25.12: View of shared surface on Frankham Street

Cycle routes

25.2.18 There are no strategic cycle routes in the immediate vicinity of the site. Deptford High Street is a signed route that joins Deptford Church Street and National Cycle Route 21 via Giffin Street. National Cycle Route 21 uses part of Deptford Church Street before turning onto Creekside at the miniroundabout to the south of the site.

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Pedestrian routes

25.2.19 There are no strategic pedestrian routes close to the site. Crossfield Street and Coffey Street lead to St Joseph's and St Paul's Church. Crossfield Street also provides a link to Deptford High Street. There are no designated Public Rights of Way on the site.

25.2.20 Although the site is reasonably well-connected in terms of transport, the high volume of traffic on Deptford Church Street and the listed railway viaduct to the south of the site create barriers to pedestrian access. Both Coffey Street and Crossfield Street are often filled with parked cars or vehicles dropping off and picking up school children.

25.2.21 The North Lewisham Links Strategy (2007) states that improvements are needed to the links across Deptford Church Street and proposes to establish a route from Deptford High Street to Bronze Street/Berthon Street to the east of Deptford Church Street.

Historical context

25.2.22 Deptford grew rapidly in the 17th century in response to the expansion of the nearby royal and commercial dockyards. There was ancillary industry and associated settlement on Deptford High Street and along the River Ravensbourne.

25.2.23 St Paul's Church was built set back from Deptford High Street in 1717/19 in the English Baroque style. A related rectory, shown in 18th and 19th century depictions of the church, was built at the same time. Although classical in design, the rectory's triangular form and large octagonal towers displayed Gothic influences often seen in the English Baroque style. Much of the churchyard's southern boundary wall dates to the 19th century; some earlier and later elements to the east and northeast of the churchyard survive.

25.2.24 The railway viaduct was added beyond the site boundary to the south in 1836. Crossfield Street was in place by the mid-18th century. Housing appeared on the site from at least the mid-18th century. A terrace of 24 houses, including a public house. fronted onto Deptford Church Street and some housing to the north fronted onto Crossfield Street. To the west of these houses were small public gardens that contained a water pump.

25.2.25 In the late 19th century, the rectory was demolished and housing was extended along the northern side of Crossfield Street. St Joseph's was built at this time. A series of residential blocks were built on the western side of the site in the late 19th century over the public gardens. In the early 20th century, the southern 14 houses of the terrace that fronted onto Deptford Church Street were demolished and replaced with a building known as Bates House.

25.2.26 The buildings on the site suffered bomb damage during the Second World War and in the late 20th century the buildings between Crossfield Street, Deptford Church Street and St Paul's churchyard were removed. A boundary wall on the western side of the former Bates House that may have been built at the same time as the house was left standing. Coffey Street was finally added in the late 20th century.







Figure 25.14:19th-century depiction of St Paul's Church ©Lewisham Local History and

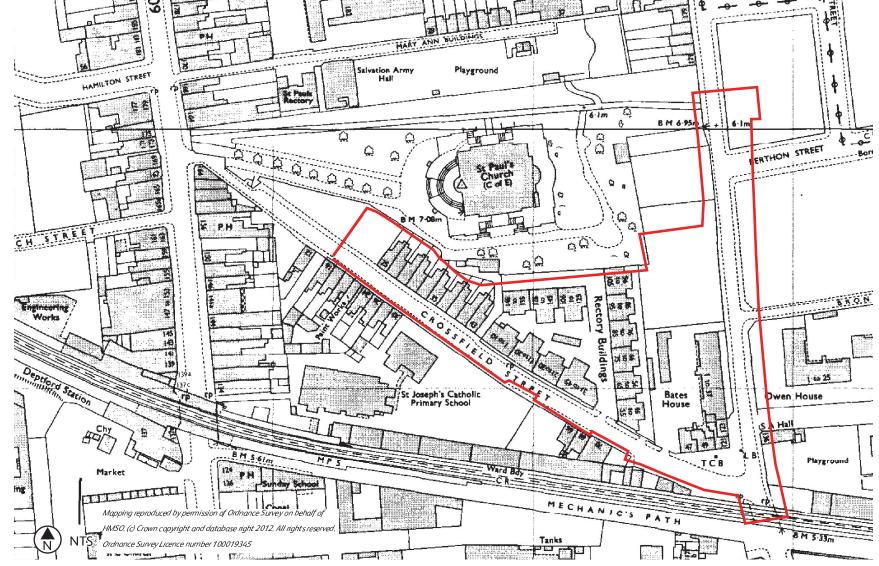


Figure 25.15: Pre-1945 site plan featuring Deptford Church Street site

Site analysis: Opportunities and constraints

The site-specific design opportunities included:

- a. Re-establish and enhance the public open space following the construction works.
- b. Improve the biodiversity and habitat value of the open space.
- c. Improve and enhance the relationship between the site and the historic surroundings.
- d. Improve the amenity and community value of the area.
- e. Improve access and movement through the open space by removing the existing brick wall and improving the fencing design.
- f. Improve the connectivity between the site and surrounding land uses in accordance with the *North Lewisham Links Strategy* (2007).

The site-specific design constraints included:

- a. The Grade I listed St Paul's Church is in close proximity to the site.
- b. Part of the site falls within the St Paul's Conservation Area and the site is in close proximity to a number of heritage assets.
- c. Part of the site is a designated Site of Nature Conservation Importance.
- d. The location of existing infrastructure and utilities may present a challenge.
- e. The site is surrounded by roads on three sides.
- f. The site is in close proximity to sensitive receptors including St Joseph's School, residential properties and a number of businesses.
- g. The site currently forms part of a fire evacuation muster point for St Joseph's School.



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25.3 Design evolution and alternatives

25.3.1 As the majority of the infrastructure for the project would be below ground, the key design objective of the permanent aboveground works was to integrate the functional components into the surroundings. The site-specific design objective at Deptford Church Street was to successfully integrate the works into an existing area of public realm and to enhance the area.

25.3.2 The design of our proposals at Deptford Church Street was also significantly influenced by an extensive process of stakeholder engagement and design review. In order to ensure design quality, we undertook two rounds of design review hosted by the Design Council CABE. We also held various pre-application meetings with the London Borough of Lewisham and other strategic stakeholders, including English Heritage. More information on our consultation process is provided in the *Consultation Report*, which accompanies the application.



Figure 25.17: Design development sketch

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Phase one consultation

CABE sketch review

May 2011

CABE scheme review

June 2011

25.3.3 The Deptford Church Street site was not presented at phase one consultation. At this stage, our preferred site to connect the Deptford Storm Relief CSO to the Greenwich connection tunnel was Borthwick Wharf Foreshore, which is located to the north of Deptford Church Street in the London Borough of Greenwich. The Borthwick Wharf site had considerable constrants including impact on residential properties and limited rod access.

25.3.4 Having considered the feedback received at phase one consultation and on-going engineering design developments, we undertook a site selection back-check (see the Final Report on Site Selection Process, Volume 21, which accompanies the application, for details). We then selected the open space at Deptford Church Street as our preferred site for phase two consultation.



Figure 25.18: Proposed view of Borthwick Wharf Foreshore from phase one consultation



Figure 25.19: Design development: Sketch review

25.3.5 A sketch review based on our initial site assessment and sketched ideas for the site was held in May 2011. Our concepts for the landscape design of the site sought to better integrate the open space into its surroundings for the benefit of the community by incorporating a shared surface treatment onto Coffey Street. We also proposed to split the site into a number of smaller plots that could support a variety of uses such as community gardens, in reference to the historic layout of private gardens on the site.

25.3.6 We proposed to reinstate the brick wall, which would have to be removed during the construction of the CSO drop shaft. At the time, it was not known whether the wall had historic significance. We proposed to combine the electrical and control kiosk and ventilation structures and integrate them into the wall. At this point we believed it would be possible to locate the CSO drop shaft near Coffey Street in order to reduce the amount of hardstanding required in the park.

25.3.7 The Design Council CABE panel considered that there was no value in replacing the brick wall, but suggested that the landscape design could acknowledge it in some way.

25.3.8 The panel also noted:

"Whilst the temporary loss of this green space is regrettable, we believe that the strategy proposed represents the best long-term solution for this space in a genuine attempt to redress its current shortcomings so that it can make a more valuable contribution to the community it serves" [Letter dated 12 May 2011].

"The design team's ideas for how this space could open itself up to the surrounding neighbourhood and, in the process, strengthen links between the Laban Centre and Sue Godfrev Nature Reserve to the east. St Paul's Church to the north, and St. Joseph's Primary School and the High Street to the west, are to be applauded" [Letter dated 12] May 2011].

"The design team should consider how to create the best possible setting for the church, exploring the possibility of extending the landscape across Coffee Street [sic] to meet it. The proposals could be of mutual benefit to this local landmark; if well executed they could galvanise its relationship with the surrounding community" [Letter dated 12 May 2011].

- 25.3.9 We therefore explored the following design considerations:
- a. the need to keep the CSO drop shaft a reasonable distance from St Paul's Church
- b. the need to intercept wastewater flows under Deptford Church Street
- c. the need to ensure access to the underground structures.

25.3.10 We held drop-in sessions on 24 and 25 June 2011 at the Creekside Centre in Deptford to inform the local community of the potential use of the site. We also gathered views on local issues that we should take account of in developing our proposals.



Figure 25.20: Sketch from Design Council CABE sketch review

- 25.3.11 We presented a more detailed scheme to the Design Council CABE prior to phase two consultation on 17 June 2011. The scheme incorporated a number of developments in the design of the engineering components as follows:
- a. We proposed a larger area of hardstanding over the interception chamber in order to accommodate access covers. We envisaged that it could form a multifunctional urban area that would also serve as an entrance to the space to draw people into the park.
- b. We incorporated a separate electrical and control kiosk into an entrance area on Deptford Church Street.
- c. In response to stakeholder comments and a historical assessment of the brick wall, we no longer proposed to reinstate it; instead, we proposed to create a path along the alignment in its memory.
- d. We increased the height of the ventilation columns and developed the concept of a 'signature' design. We proposed to incorporate four of the columns into the landscaping on the southern edge of the site to mark the end of the brick wall.



Figure 25.21: Proposed view from Design Council CABE scheme review

e. We proposed to create a second, wider path aligned

proposed to enclose the western end of the site further and considered converting it to a community garden or

25.3.12 The Design Council CABE panel recommended

the project to consider how to create the best possible

setting for the Grade I listed church and to explore the

possibility of extending the landscaping across Coffey

community to play a key role in developing the designs

would increase the likelihood of a successful outcome.

"We support the idea of marking the entrance into the

space with a gateway structure on Deptford Church Street

that draws visitors into a multi-function civic space that

could host a variety of community activities set behind a

planted screen and kiosk, accessed from a single entrance

on Deptford Church Street, and also the proposal to turn

Coffey Street into a shared surface road that is capable of

"It is felt important to reference the position of the rectory wall in the scheme; we think this could be achieved in a subtle way by, for example, marking its alignment in mown grass or planting, rather than subdividing the space with a path that does not follow a particular pedestrian desire

25.3.14 Finally, the panel noted a need for more clarity

regarding the provision of an entrance to the park on the northeastern corner of the site. It stated that this concept was diluted by the adjacent improved pedestrian route on Coffey Street and suggested establishing a hierarchy of

hosting local markets. This design should anticipate the operational requirements of stallholders" [Letter dated 27]

25.3.13 The panel also noted:

line" [Letter dated 27 June 2011].

Street to meet the church. It suggested that allowing the

with the gates to St Paul's Churchyard to provide

play-space.

June 2011].

routes.

maintenance access to the CSO drop shaft. We also

November 2011

Design development

changes to the proposed design:

25.3.15 In response to the design reviews and stakeholder engagement, we made the following key

- a. We omitted the proposed entrance on the Deptford Church Street and instead proposed to screen the space from road traffic with climbing plants.
- b. We omitted the path to mark the position of the brick wall and proposed to reference it more subtly with a line of seasonal planting.
- c. We omitted the access from the corner of Deptford Church Street and Crossfield Street in order to reinforce the character of the central space and strengthen the focus towards Coffey Street.
- d. We reduced the area of hardstanding over the interception chamber as far as possible and reshaped it to correspond to the triangular geometry of the site.



Figure 25.22: Design development: Interim design



Figure 25.23: Design development: Sketch street view

25.3.16 At phase two consultation, the key concerns raised in relation to the design of the proposals at Deptford Church Street included:

- a. the impact of the permanent structures on St Paul's
- b. the value of green space to the community

Phase two consultation

- c. the appearance of the completed site
- d. the disruption to the open space link between Deptford High Street and Deptford Creek.
- 25.3.17 The Design Council CABE echoed its comments at the sketch and scheme reviews.
- 25.3.18 Following phase two consultation, we continued to liaise with representatives of the London Borough of Lewisham to develop the design and design principles for the site in order to accommodate their aspirations for the area. A detailed *North Lewisham Links Strategy* for this area is as yet unpublished, which may influence the operation and appearance of the final design.
- 25.3.19 There were no significant developments in the design proposals for this site following phase two consultation.



Figure 25.24: Phase two consultation: View down Coffey Street



Figure 25.25: Phase two consultation and Section 48 design

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25.4 Proposed design

25.4.1 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

- 25.4.2 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, the ventilation structures and columns, and the electrical and control kiosk.
- 25.4.3 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.

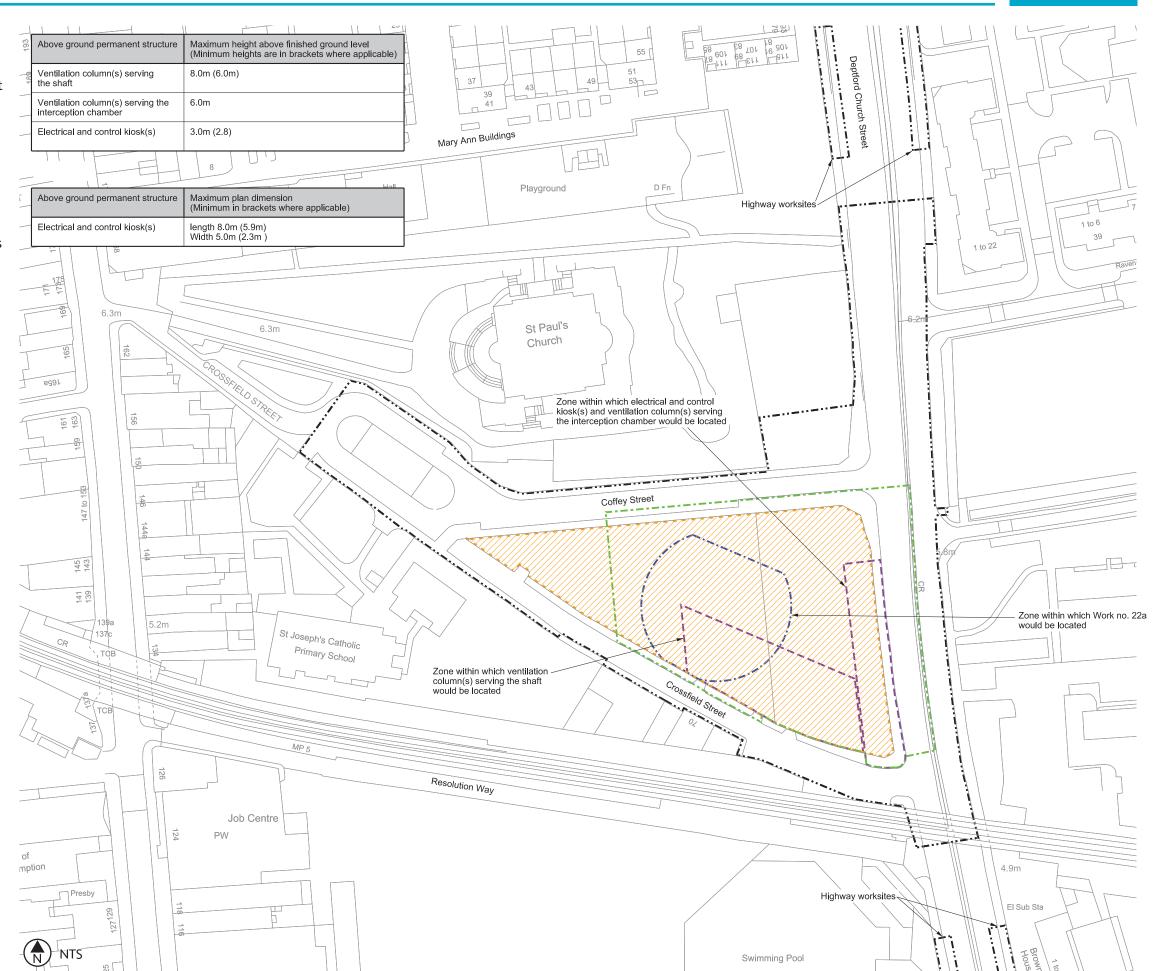


Figure 25.26: Parameter plan-refer to Parameter plan in the Book of Plans

Design objectives

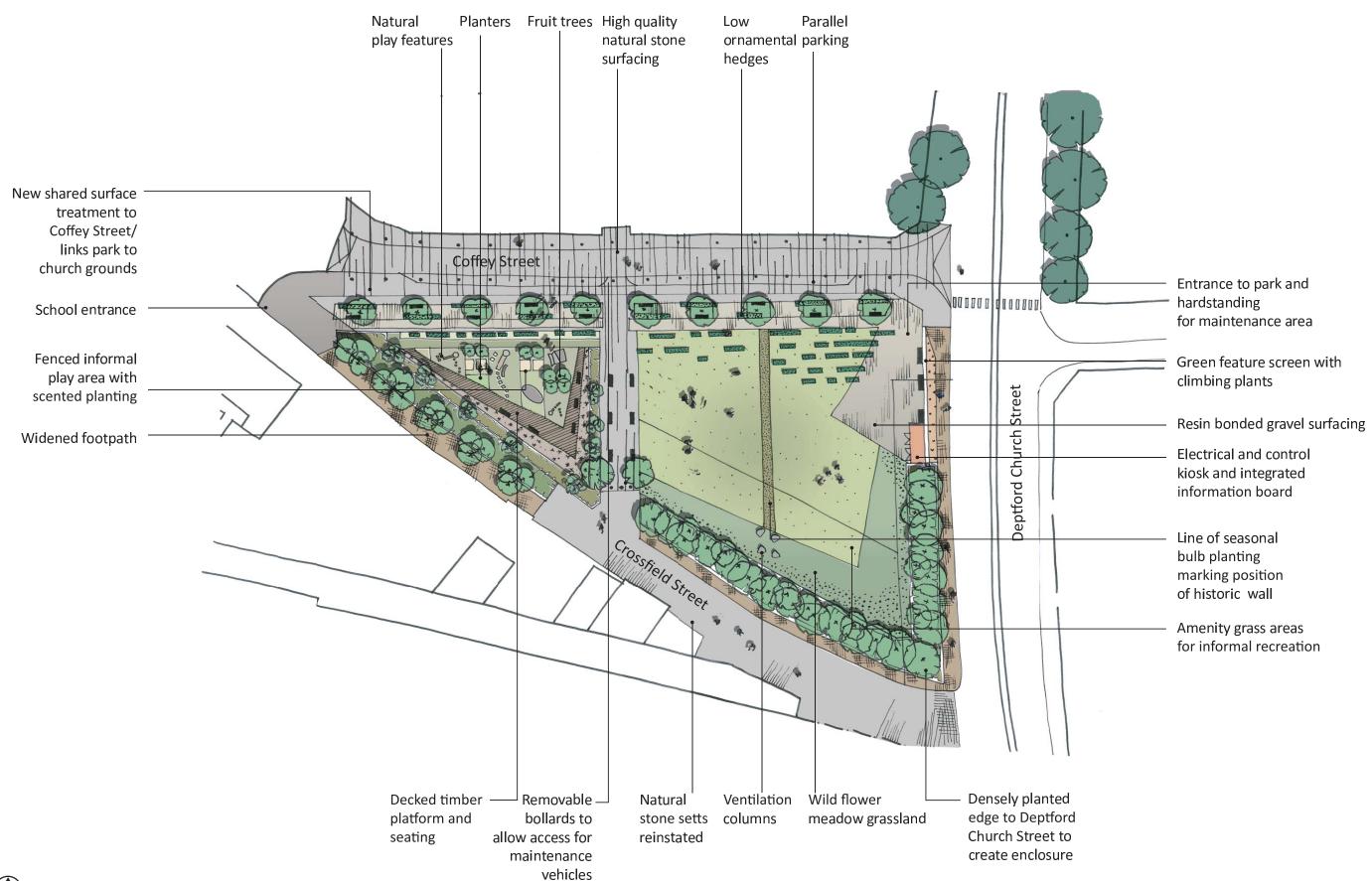
- 25.4.4 The main driver behind the development of the illustrative designs was to explore opportunities to reinstate and improve the area of open space. Our design objectives included:
- a. Respond to the history of the site and some of the unique features of the area, specifically St Paul's Church and St Joseph's School.
- b. Anticipate and enhance pedestrian routes for the area identified in the *North Lewisham Links Strategy* (2007).
- c. Create a pleasant area of well-designed open space that would be well used by the community.

Use and programme

- 25.4.5 We have produced two illustrative landscape design proposals for the Deptford Church Street site that illustrate different ways in which a new community-orientated public park could be created on completion of our works. Option 1 is the design that was consulted on at phase two consultation and Section 48 publicity. Option 2 presents an alternative to demonstrate the flexibility of the layout of the park.
- 25.4.6 The park could become a local destination for residents and their families for a mixture of formal and informal activities. It could also provide the opportunity to host community events throughout the year that would link Deptford High Street, local schools, and the Sue Godfrey Local Nature Reserve.



Figure 25.27: Option 1 - Aerial Landscape view



Illustrative landscape design

25.4.7 Following discussions with the council, it was agreed that the landscape design would be a matter for the local authority to determine through the imposition of a requirement in the DCO, with the involvement of the local community. For this reason, we are not seeking approval for any landscaping works at this site in our application for development consent except for the site works parameter plan and the design principles.

Option 1

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25.4.8 The main character areas of the design include the central area of informal open space, the shared surface treatment onto Coffey Street, and an enclosed garden.

Informal open space

25.4.9 The main open space is intended to be used in a largely informal way for various activities such as a place to meet, stroll, have picnics, and play sport. However, space for formal sports pitches would be limited.

25.4.10 Our proposals would enable St Joseph's school to continue to use the informal open space as a fire assembly place on completion of our works.

25.4.11 We propose to permanently remove the brick wall in order to make the space more flexible and allow visual connectivity across the site.

Shared surface onto Coffey Street

25.4.12 We propose to create an area of high quality shared space along Coffey Street with a flush connecting surface between St Paul's Church and the informal open space. This would comply with the aspiration set out in the North Lewisham Links Strategy (2007) for the area and create a strong visual link between the church and the open space. It would also provide the opportunity to enhance the setting of the listed church.

25.4.13 It should be noted, however, that



Figure 25.30: Example of an informal open space

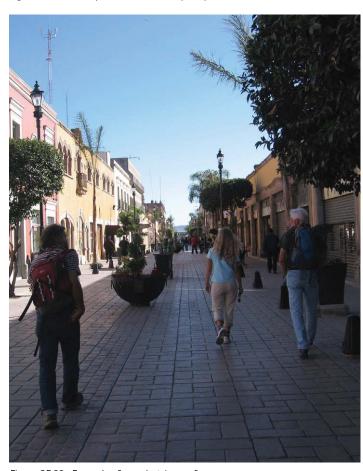


Figure 25.33: Example of a pedestrian surface



Figure 25.31: Example of a shared pedestrian surface



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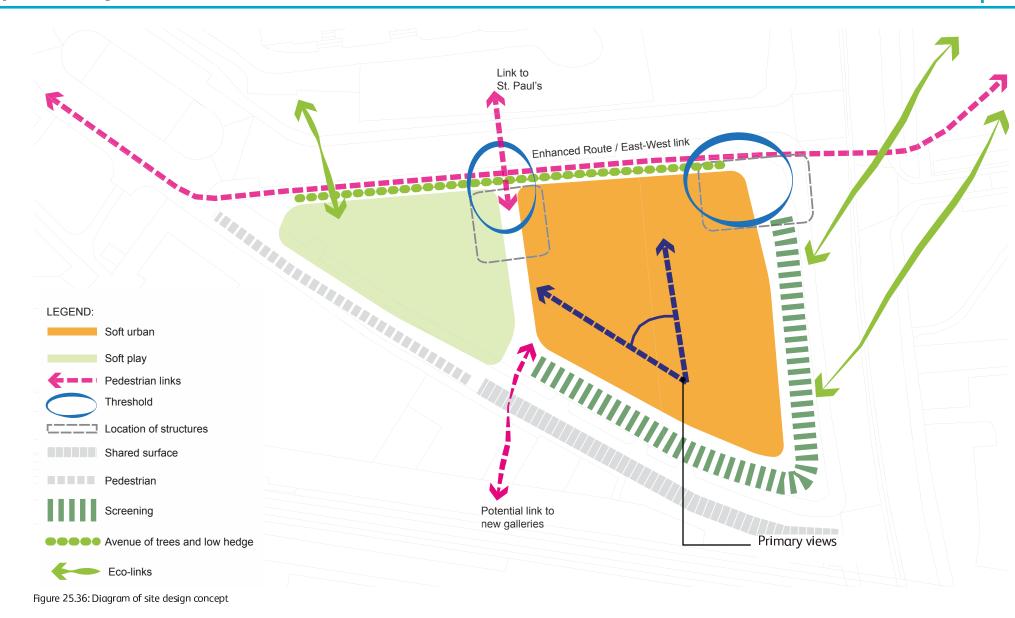
Figure 25.32: Example of a community garden



Figure 25.34: Example of a place for children's play



Figure 25.35: Example of an enclosed garden



the shared surface treatment would be outside of the required statutory mitigation measures incorporated into the proposed landscape plan. Therefore a separate agreement would be required with the London Borough of Lewisham in order to implement it.

25.4.14 Vehicular access and the existing areas of parallel parking would be retained; however the treatment would be designed to give pedestrians and cyclists priority.

25.4.15 Coffey Street could also be planted with large London Plane trees to create a formal avenue promoting eastwest movement. This would also tie in to the character of the wider landscape of the churchyard. Enhanced linkages and connections to the surrounding area create potential opportunities to hold seasonal markets and other community events.

Enclosed garden

25.4.16 We recognise that the site may be used by school children from St Joseph's school and believe that the detailed designs should be driven by the needs of the local community and schools. Therefore we propose to include an area that could be used as a community garden/orchard, a small scale food/herb garden, an educational play space or a flexible grassed area for informal recreation.

25.4.17 The area would be enclosed by a low fence and a hedge to create a safe, semienclosed space for families to enjoy. It could incorporate opportunities for natural and equipment-based play, tailored to the needs of toddlers and young children.

Integration of the functional components

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

a. a CSO drop shaft

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- b. a CSO interception chamber
- c. a valve chamber
- d. a connection culvert
- e. air treatment chambers
- f. associated hydraulic structures, culverts, pipes and ducts.
- 25.4.19 Post construction, the following structures would be visible on-site:
- a. four signature ventilation columns to serve the CSO drop shaft
- b. one small-diameter column to serve the interception chamber
- c. an electrical and control kiosk

CSO drop shaft and associated structures

- 25.4.20 The CSO drop shaft would connect the Deptford Storm Relief Sewer to the Greenwich connection tunnel. It would have an internal diameter of approximately 17m. The drop shaft would be ventilated by the associated air treatment chambers and high pressure release chamber.
- 25.4.21 The interception chamber and valve chamber for the Deptford Storm Relief Sewer would be located near the line of the sewer, which runs adjacent to the western side of the site beneath Deptford Church Street. The interception structure would be linked to the CSO drop shaft by the connection culvert.

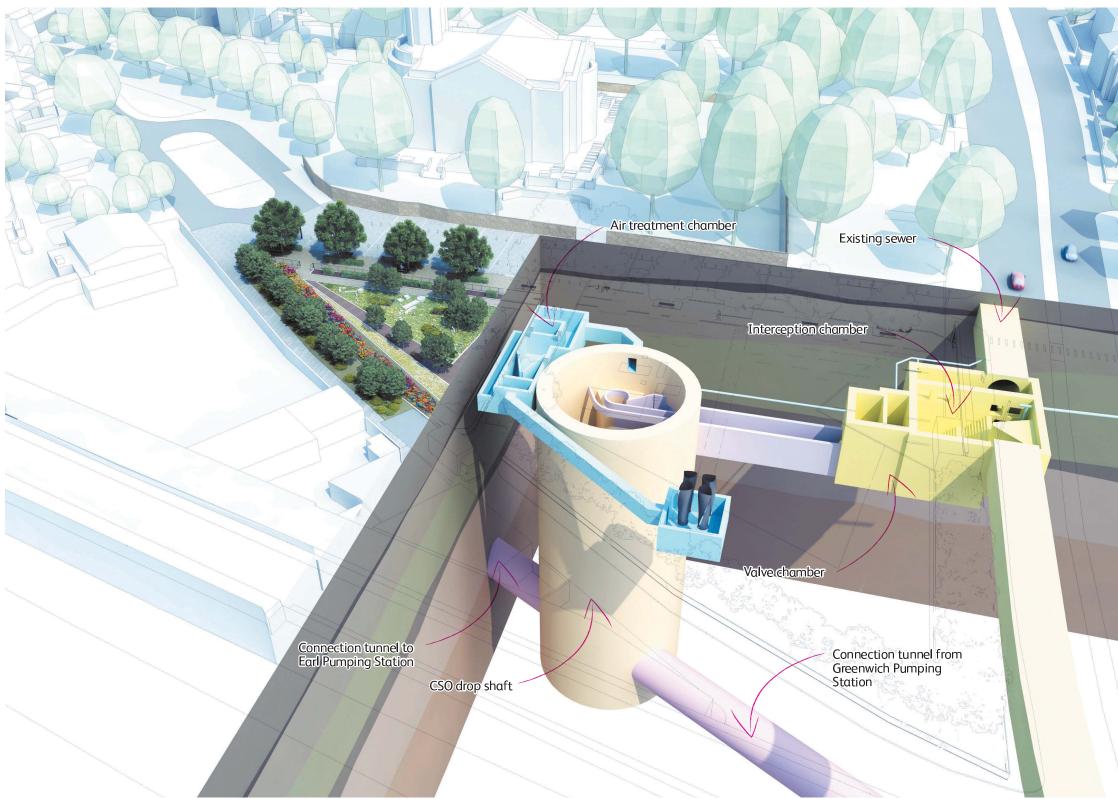


Figure 25.37: Proposed functional components diagram: below ground view



Figure 25.38: Proposed functional components diagram: above ground view

Electrical and control kiosk

25.4.22 The electrical and control kiosk would stand up to 3m high on the eastern boundary of the site at the end of a planted strip to the south. The kiosk in the illustrative design is slightly larger than the functional requirement and was enlarged to be the same width as the planted strip.

25.4.23 Maintenance activities require the kiosk to be visible from the interception chamber in Deptford Church Street. This position would also help to screen the open space from traffic noise from Deptford Church Street. It is not possible to provide the same intensity of planting to the north of the kiosk due to the location of the interception chamber below. Therefore the kiosk could form part of a lightweight screening structure planted with climbers.

25.4.24 We propose to clad the kiosk in a high quality material such as York stone to reference the materials of St Paul's Church. The kiosk could further contribute to the public realm by incorporating interpretive material such as an information board explaining the history of the site.

Option 2

25.4.25 Like Option 1, Option 2 incorporates a shared surface treatment onto Coffey Street and the location and size of the functional components is largely the same. However, while Option 1 maximises the grassed area available for incidental play, Option 2 proposes a central square that would transform the open space and create a new focus for the area.

25.4.26 The square would be available for multi-functional use by the community and feature a simple contemporary design with a matrix of paths and a series of smaller grassed spaces. The network of paths would create new links between St Paul's Church, St Joseph's School, Crossfield Street and two points on Deptford Church Street. The paths would converge in the central square to form a community hub and improve passive surveillance. The grassed spaces would radiate around the square and be used for incidental play and relaxation.

25.4.27 The square would sit on top of the CSO drop shaft and the paths would be aligned to incorporate access covers to the interception chamber and ventilation infrastructure.

25.4.28 The edges of the square would be reinforced with large, sculptured benches and a patterned backdrop of trees and shrubs of contrasting forms, colours and textures. The surface of the square and radial paths would be a high quality natural stone.

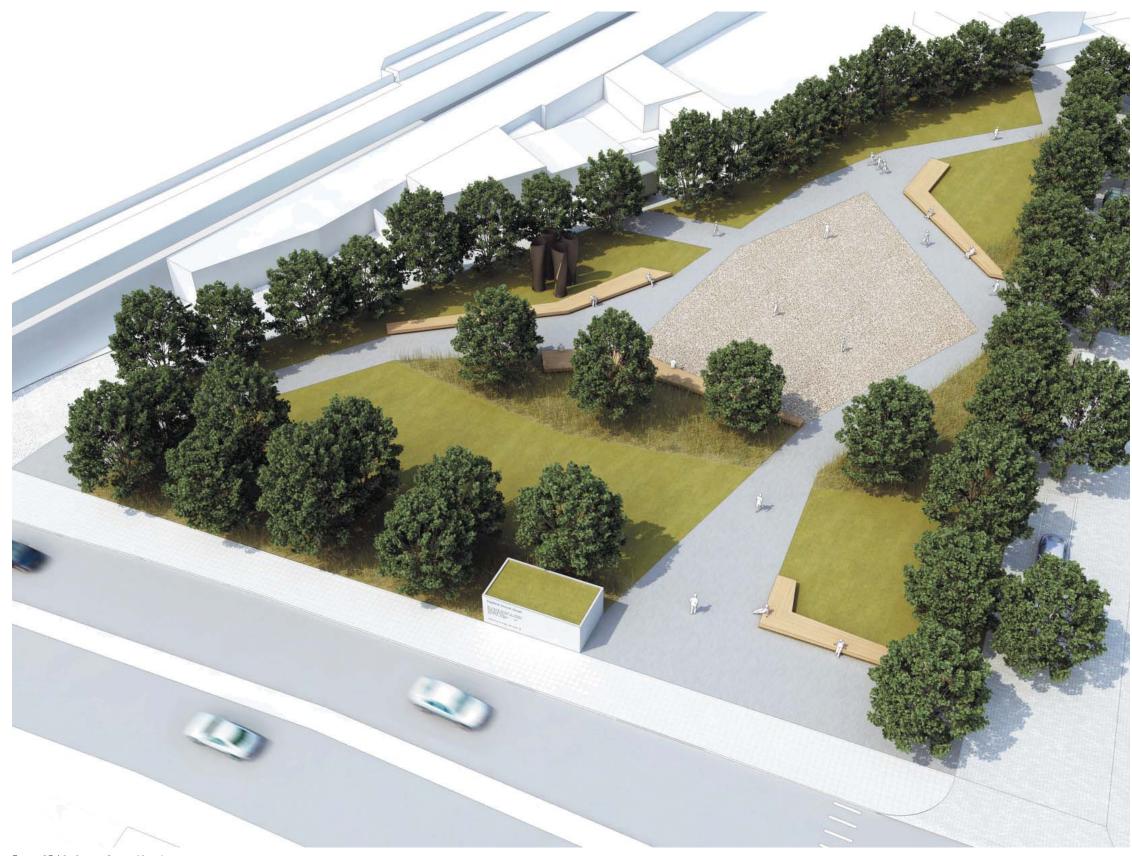


Figure 25.46: Option 2 aerial Landscape view



Ventilation columns

25.4.29 The four ventilation columns to serve the CSO drop shaft would be between 6m and 8m high and feature the project's signature design. We have made provision in our application to increase the height of the columns in the final design to a maximum of 8m, if it is demonstrated that this would improve their proportions and visual appearance. The signature cast iron design would be finished in black to reference other historic cast and wrought iron features in the area.

25.4.30 A plan area of 4m² is required for the ventilation columns at this site. If the columns were incorporated into a single structure, it would be the size of a small building. In order to limit the number and reduce the apparent bulk of 'built' structures in the park, we divided the required ventilation equipment into four equal units. The proposed columns would be a similar size to street furniture or pieces of public art usually found in parks.

25.4.31 The columns would sit within the open space in the southeastern corner of the site, in an area of wild flower planting on the southern boundary. The columns would be positioned away from St Paul's Church and leave as much open space in the centre of the site as possible. The base of the columns could be screened by taller meadowland species. The position of the columns could also mark the end of the line of the brick wall to reference the historical development of the site.

25.4.32 The smaller-diameter ventilation column would ventilate the interception chamber and must therefore be located outside the open space, to the southeast of the existing signalised crossing point on Deptford Church Street. The column would be a maximum height of 6m and similar in scale to a lamppost. It would be finished to blend in with nearby street furniture.

Access covers and hardstanding

25.4.33 Areas of hardstanding would be included to facilitate maintenance vehicle access and incorporate access covers to the below-ground infrastructure. Access to the below-ground equipment would be required at various intervals. Some covers used to replace or remove equipment would be accessed infrequently and may be buried. Covers used to inspect the equipment would be accessed more frequently. They must be easily accessible and preferably set within hardstanding. We sought to incorporate the hardstanding where it could contribute positively to other functions of the space and further facilitate access and movement around the site.

25.4.34 We propose to incorporate two areas of hardstanding: the first would be a northsouth path across the site. The path would aid pedestrian movements and separate the open space from a proposed enclosed garden. It would be aligned with the access gates to St Paul's Church in order to strengthen the connection with the Church.

25.4.35 The second area of hardstanding would lie above the interception chamber in the northeastern corner of the park. It was designed to form an informal seating area that would reflect the triangular geometry of the site. It would open on to Coffey Street to the northeast to draw passers-by into the open space.

25.4.36 In addition to the access covers in the areas of hardstanding, a number of covers would be required over the CSO drop shaft in the central grassed area. This would limit accessibility but it is necessary in order to maximise the available green space. We conducted feasibility studies of incorporating planted access covers, although the technology is largely untried at this scale. Therefore it may be necessary to finish these covers with 'Astroturf'.



Figure 25.39: View of ventilation columns

Landscaping and appearance

25.4.37 Once the engineering works are complete, the site would be appropriately landscaped in line with the design principles for the site and agreed by the local planning authority.

25.4.38 In developing the legacy proposals for the open space, we had regard to the London Borough of Lewisham's Core Strategy Policies 12 and 15, *Unitary Development* Plan Policies OS.7 and URB3 and the North Lewisham Links Strategy (2007), which seek to protect the character, historic interest and amenity of open spaces and to improve their quality and accessibility. We believe that our legacy proposals would significantly improve the value, accessibility, and usability of the open space. They would also enhance the setting of the conservation area and the Grade I listed St Paul's Church and other nearby listed structures. The proposed use is also consistent with Policy 5.14 of the *London* Plan 2011

Hard landscape palette

25.4.39 The proposed hard landscape materials and furniture palette comprises good quality contemporary fittings that would stand the test of time. Street lights, bins and furniture would be robust and non-bespoke to enable simple management and maintenance. Hard surface materials would be fit-for-purpose and appropriate to the setting.

25.4.40 We propose to use high quality surface materials such as natural stone on the shared surface treatment onto Coffey Street.

Soft landscape palette

25.4.41 All existing trees on the site would be removed during construction and replaced on completion of the works.

25.4.42 The open space would be open 24 hours a day therefore any planting must be designed to allow good natural visibility across the park to promote safety and security.

25.4.43 The soft landscape palette would use largely native tree species. We propose to use London Plane trees for the formal avenue on Coffey Street. However, the proposed community garden in Option 1 could incorporate some non-native ornamental shrubs and a range of perennial shrubs to

create seasonal variety. Planters could also incorporate herbs and vegetables as well as fruit trees or orchard-type planting.

25.4.44 The boundaries with Crossfield and Deptford Church Streets could be mounded and planted with a mixture of ground covers.

25.4.45 We propose to subtly reference the alignment of the brick wall with seasonal bulbs that would create a flourish of colour for a few weeks a year. In addition, the southern and eastern edges of the informal open space in Option 1 could be seeded with wildflower meadow grassland to potentially increase biodiversity and screen the ventilation columns.

25.4.46 Formal strips of low, clipped yew hedges could be used to define the northern edge of the informal open space adjacent to St Paul's Church in Option 1. The hedges would enclose the space but form a permeable, transitional treatment between the informal open space and the shared space on Coffey Street.

25.4.47 The tree, grass and shrub species selected would support the aims and objectives set out in the local *Biodiversity Action Plan* and relevant local open space and green infrastructure strategies in agreement with the London Borough of Lewisham.

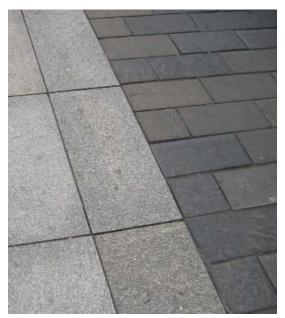


Figure 25.40: Natural stone paving



Figure 25.43: Street lighting



Figure 25.41: Self binding gravel

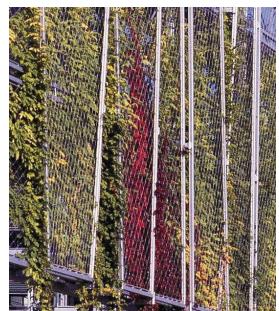


Figure 25.44: Climbers on wire frame screen



Figure 25.42: Timber benches



Figure 25.45: Natural play structures

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25.5 Access and movement

Pedestrian routes

- 25.5.1 We propose to open the site up to allow both east-west and north-south movement as part of a quality pedestrian link between Deptford High Street and Deptford Creek. The final pedestrian routes and paths would be agreed at a later stage as part of the detailed landscape design.
- 25.5.2 The primary east-west pedestrian route across the site would be the shared surface onto Coffey Street, which would comply with the requirements of *Core Strategy* Policy 15, saved *UDP* Policy URB3 and the recommendation of the Design Council CABE.
- 25.5.3 The north-south route would provide a link across the open space to the existing gate to St Paul's Church. In the long term, this route could be extended south beneath the railway arches.
- 25.5.4 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.

Vehicle access

- 25.5.5 We propose to retain the current parking provision, unless advised otherwise by the London Borough Lewisham. Similarly, the vehicle access routes to St Joseph's School would remain as existing.
- 25.5.6 The entrance on Crossfield Street could also provide a hammerhead turning area (similar to the existing area) for vehicles accessing the industrial units to the southeast of the site.
- 25.5.7 The bus stops that would be relocated during construction would be reinstated as existing unless agreed otherwise.

Thames Water access requirements

- 25.5.8 Once the project is operational, access to the works would be via two new entrances off Crossfield Street and Coffey Street.
- 25.5.9 Another access would be provided at the northeastern corner of the open space to the electrical and control kiosk and the interception chamber. This access could be used by a second crane. There would be an access cover to the flap valve in the western carriageway of Deptford Church Street. An access agreement with the local authorities and temporary traffic suspension measures would be required.
- 25.5.10 It is anticipated that Thames Water personnel would visit the site approximately every three to six months to inspect and carry out maintenance of the ventilation and belowground equipment. This would likely involve a visit by personnel in a van and may take several hours.
- 25.5.11 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 require 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 likely take several weeks. A second crane could be positioned in Coffey Street if required.
- 25.5.12 Thames Water may also need to visit the site for unplanned maintenance or repairs, for example, in the event of a blockage or equipment failure. Such a visit may require the use of mobile cranes and vans.

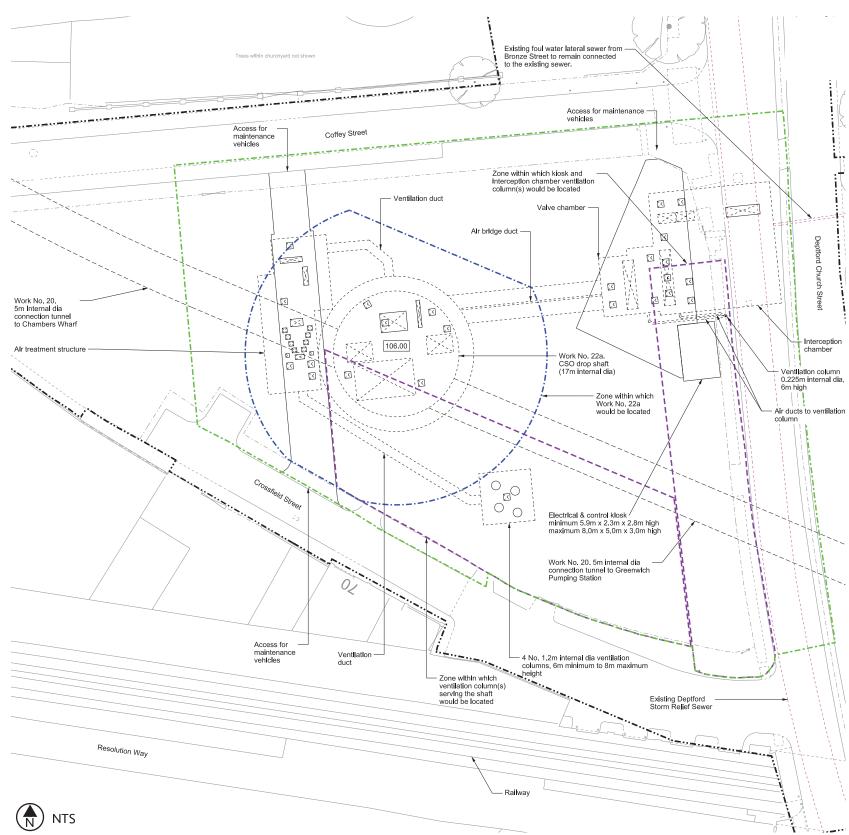


Figure 25.48: Permanent work layout plan-refer to the Permanent works layout in the *Book of Plans*



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