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13. Tower Hamlets Route Section – Environmental Baseline and Assessment of Impacts

13.1 Overview of Route Description within the London Borough of Tower Hamlets

- 13.1.1 This section comprises the tunnelled section from Spitalfields to Stepney Green where the central section divides. From Stepney Green, one route runs to the north-east in a tunnel to Bow where it passes into London Borough of Newham. The other route runs to the south-east to Isle of Dogs and on to Limmo peninsula in London Borough of Newham.

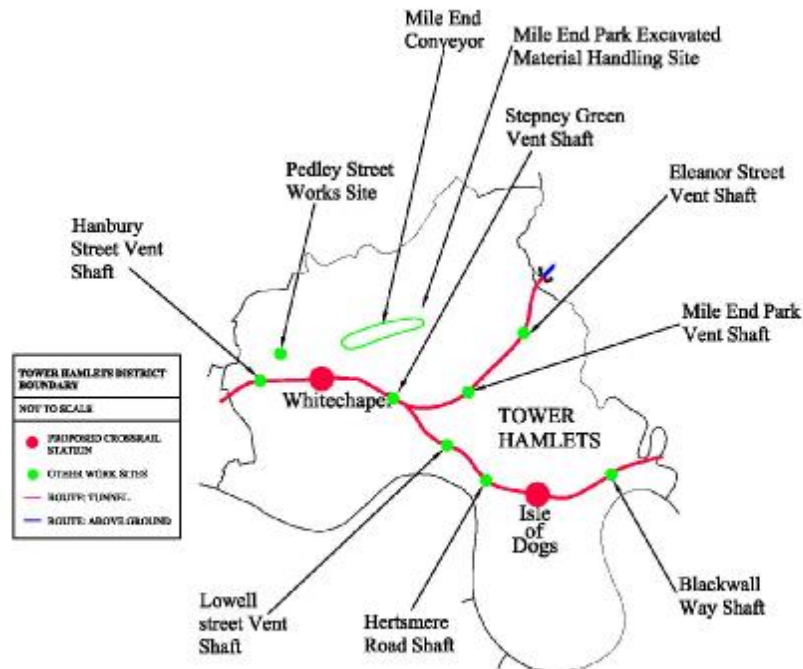


Figure 15.1: Location of Crossrail stations and worksites within L.B. Tower Hamlets

- 13.1.2 New stations are proposed at Whitechapel and the Isle of Dogs. Whitechapel station includes provision for an interchange with the District and East London Line and in the 2016 baseline the Metropolitan line replacing the current Hammersmith and City service.
- 13.1.3 New ventilation and emergency intervention points are proposed at Hanbury Street in Spitalfields, Essex Wharf in Whitechapel, Stepney Green Park, Lowell Street in Limehouse, Hertsmere Road at West India Dock, Mile End Park, Eleanor Street in Bow and Blackwall Way near East India Dock.
- 13.1.4 An additional construction shaft is proposed to run from the Hanbury Street ventilation and intervention point to a new works site at Pedley Street, a

short distance to the east of Bishopsgate. This shaft will be used to transfer tunnel spoil out of the central section beneath the City of London. At Pedley Street, the spoil will be removed from the shaft for transfer via a conveyor belt to a purpose built railhead at Mile End Sand sidings. The spoil will be moved from the sidings by rail to the eventual disposal point east of London.

13.2 London Borough of Tower Hamlets

Statutory Development Plan

- 13.2.1 In Tower Hamlets, the statutory development plan comprises the saved Tower Hamlets Unitary Development Plan (adopted December 1998) and the London Plan (adopted February 2004).
- 13.2.2 The London Borough of Tower Hamlets is in the process of reviewing its UDP and published a 1st Deposit Draft in May 2004. As this draft plan is at an early stage in the process towards adoption it carries less weight than the saved UDP. Under the transitional arrangements brought into force by the Planning and Compulsory Purchase Act 2004, the Council is continuing the process of adopting the UDP and a re-deposited draft is expected to be published in April 2005.

13.3 Policies relevant to all worksites in Tower Hamlets

Transport & Traffic Management

- 13.3.1 The London Borough of Tower Hamlets actively supports Crossrail and recognises it as a major transport infrastructure project that is likely to have a significant impact on trip patterns (page 80 emerging UDP).
- 13.3.2 Policy T1 of the saved UDP encourages improvements and extensions to rail and underground services across the Borough provided they are not harmful to the amenity of residents or otherwise damaging to the environment of the Borough.
- 13.3.3 Strategic Policy SP11 of the emerging UDP promotes the ease of movement and reduction of congestion and pollution within Tower Hamlets through the development of integrated infrastructure for physically accessible, sustainable, efficient public transport, cycling and walking/wheeling networks.
- 13.3.4 The Crossrail proposals also comply with saved UDP strategic policy ST27 which supports improved public transport. Crossrail will significantly add to and improve public transport facilities within Tower Hamlets and the emerging plan recognises that without substantial investment in transport across the Borough, especially in transport projects such as the development of Crossrail, the ambitious growth targets expressed in the London Plan will be difficult to achieve (page 75).
- 13.3.5 Crossrail will significantly add to and enhance rail and underground services across Tower Hamlets. The individual worksite assessments below identify cases where there will be impacts particularly during construction. These impacts have been mitigated wherever possible. In the long term, Crossrail

will significantly improve rail and underground facilities within Tower Hamlets, and no permanent adverse impacts and the proposals therefore fully accord with policy T1 of the saved UDP and policies SP11 and TRN2 of the emerging UDP.

- 13.3.6 Paragraph 5.5 of the saved UDP (Transport Chapter) states that whilst it would bring much needed relief to rail and underground services, the Crossrail proposals of the early 1990s would have had '*unacceptable environmental disbenefits in the short and long term*'. LBTH advised that they would wish the route from Liverpool Street to Stratford to be tunnelled. The current hybrid Bill proposals run in a tunnel throughout Tower Hamlets.
- 13.3.7 Similarly, when considering development proposals the Council will take account of the impact of the traffic that is likely to be generated (Policy T16 adopted UDP). In particular, account will be taken of danger or significant inconvenience to other road users, including pedestrians and cyclists; obstruction of the movement of traffic on major roads; and a deterioration of residential and other sensitive areas.
- 13.3.8 The Crossrail proposals will have significant traffic and highway impacts at some worksites (Whitechapel, Stepney Green, Hertsmere Road, Isle of Dogs) in Tower Hamlets during the construction phase with an increase in heavy goods vehicles and the temporary closure or diversion of a number of roads and footpaths. Whilst the saved and emerging UDPs' do not have a specific policy against which to assess the impacts of construction traffic, these impacts conflict with the general intent of the saved and emerging UDPs' traffic management and pedestrians policies. In the short term, there will be disruption to other road users and pedestrians.
- 13.3.9 The proposals will have no adverse significant permanent impacts on traffic and transport.
- 13.3.10 The proposals are supported by an Environmental Statement that contains a Transport Impact Assessment (TIA) for both the construction and operational phase that has identified the likely significant impacts. This complies with Policy TRN 7 of the emerging UDP. The ES has identified mitigation measures to reduce the identified impacts. Prior to construction the nominated undertaker will agree with the Local Authority a construction traffic management plan which will seek to minimise disruption of the highway network.
- 13.3.11 The Council encourages the movement of heavy goods by water and rail wherever possible to reduce unnecessary road congestion (Policy TRN12 emerging UDP, ST33 adopted UDP). Aggregate materials and spoil will be transported by rail from Mile End and by barge from the Isle of Dogs and the proposals comply with this policy.

Environment

- 13.3.12 Alternative locations for Crossrail stations, ventilation shafts, tunnel portals and other infrastructure elements have been appraised during the development of the preferred scheme, taking into account environmental constraints. For example, at Whitechapel the location of the ventilation and intervention point was moved from Vallance Road Gardens to Durward Street, avoiding the loss of open space and significant archaeological impacts on an ancient burial ground. However, some environmental impacts, primarily those related to construction activity, are unavoidable.

- 13.3.13 The mitigation measures contained in the Crossrail Environmental Statement describe how the construction of the project will be managed to ensure that the impacts will be controlled and mitigated as a minimum. The nominated undertaker will continue to work with London Borough of Tower Hamlets to minimise the environmental impacts of the project in the detailed design of the scheme and in agreeing appropriate control over construction.
- 13.3.14 Crossrail will have a significant impact on a number of nature conservation and open space designations including Metropolitan Open Land (policy OS6 adopted UDP & ENV 25 emerging UDP), Public Open Space (policy OS7 adopted UDP & ENV 26 emerging UDP), Green Chains (policy DEV 57, 63 adopted UDP) and Sites of Nature Conservation Importance (policy DEV 57, 58, 62 adopted UDP). The individual assessments below identify significant impacts.
- 13.3.15 The Council requires a site investigation to be carried out where development is to be carried out on contaminated land (policy DEV51 saved UDP and ENV9 emerging UDP). The Crossrail ES concludes that there will be no significant adverse contamination impacts.

Amenity

- 13.3.16 The Council seeks to ensure that all development protects residential amenity and the environment from the affect of pollution (Policies ENV1 and DEV2 of the saved UDP and policy ENV1 of the emerging UDP).
- 13.3.17 Policy DEV50 of the saved UDP states that developers will be expected to include information relating to the noise generated by the proposal and agreements to reduce their impacts – in some circumstances permission may be refused. Policy HSG15 of the saved UDP seeks to resist any development that has an adverse impact on residential amenity.
- 13.3.18 The Crossrail ES has reported that with the mitigation measures set out in appendix B1 of the Crossrail ES in place, including sound insulation, site screening and temporary re-housing a number of residential properties will be affected by significant noise impacts. The proposals are therefore contrary DEV50 of the saved plan and ENV3 of the emerging UDP.
- 13.3.19 The emerging UDP sets out (Policy ENV1) a number of factors, which in addition to noise, against which the Council will assess the impact of development in terms of its affect on amenity. These include privacy and overlooking; sunlight and daylight levels; artificial light levels (ENV2); odour, fumes and dust (ENV6, 7). A number of other policies address these factors individually as referenced above.
- 13.3.20 The mitigation measures contained in the Crossrail ES seek to minimise the amount of disturbance, nuisance and pollution during the construction period and once operational. The nominated undertaker will continue to work with the London Borough of Tower Hamlets to minimise these impacts through the detailed design of the scheme and in agreeing appropriate control over construction.

Design

- 13.3.21 General design requirements for development within Tower Hamlets are set out under Policy DEV1 of the adopted UDP. The Council states that all development proposals should take into account and be sensitive to the

character of the surrounding area; be sensitive to the development capabilities of the site; maintain continuity of street frontages; provide adequate access for disabled people; include proposals for the design of external treatments and landscaping.

- 13.3.22 Many of the policy requirements of DEV1 are expanded upon individually in policies UD1 (scale and density), UD2 (architectural quality), UD3 & TRN6 (ease of movement and access through inclusive design), UD5 (safety and security) and UD11 (landscaping) of the emerging UDP.
- 13.3.23 Policies DEV12 and DEV13 of the adopted UDP require landscaping and tree planting schemes respectively as part of redevelopment schemes.
- 13.3.24 Proposals for new development within conservation areas are expected to be of the highest standards of design that will preserve and enhance the character and appearance of the area (policy DEV15 of the adopted UDP & UD22 of the emerging UDP).
- 13.3.25 The provisions of the hybrid Bill deem planning permission to be granted for the authorised works to construct the railway. The Bill provides for a special planning regime for the approval of detailed design by the local authority at a later date. At this stage, an assessment of the impact on townscape has been made on the basis of scale, height, and siting of the ticket halls and other related structures. Moreover, the assessment has assumed that there will be voids where buildings are demolished to accommodate the infrastructure works, given that powers for replacement development are not being sought through the Hybrid Bill. As such, at a number of worksites reviewed below, there is an apparent conflict between the proposals and design policies.
- 13.3.26 It is likely that these impacts can be reduced or mitigated at a later stage when the detailed design of the operational elements of the scheme and materials to be used are agreed by the London Borough of Tower Hamlets, and through the provision of replacement buildings.

13.4 Hanbury Street Shaft (Window C8)

Significant Characteristics of Site and Surrounding Area

- 13.4.1 The proposed Hanbury Street shaft will be located at 68-80 Hanbury Street, between Liverpool Street Station and Whitechapel Station. The site is located approximately 1km to the east of Liverpool Street in Spitalfields and close to Brick Lane. The works site extends to 80 to 102 Hanbury Street and 61 to 67 Princelet Street.
- 13.4.2 The Hanbury Street site comprises office and commercial storage uses with retail uses on Princelet Street.
- 13.4.3 The site is located within but at the eastern boundary of the Fournier Street Conservation Area. This covers most of the Brick Lane area.
- 13.4.4 Pedley Street worksite lies a short distance to the north near the Bishopsgate Goods Yard.

Overview of proposals

- 13.4.5 An intervention and ventilation shaft is proposed. Intervention is required to enable emergency services and maintenance personnel to gain access to the running tunnels. Forced ventilation is required to control the air direction in an emergency situation and to provide cooling during warm weather.

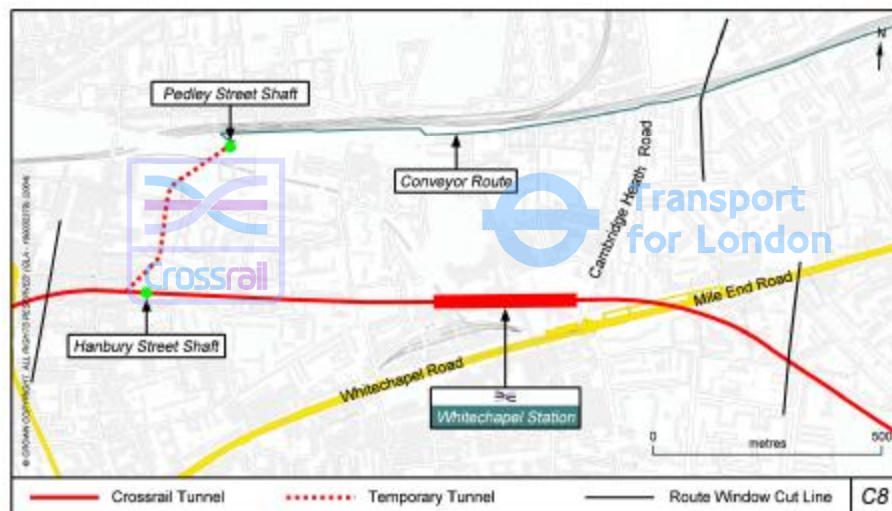


Figure 15.2: Location of worksites and Crossrail stations within route window C8

Permanent Works

- 13.4.6 To comply with safety requirements, Crossrail will need to construct a shaft between Liverpool Street and Whitechapel stations. A shaft measuring 17 metres in width and 37 metres in length will be constructed at the junction of Hanbury Street, Spellman Street and Princelet Street. The shaft will contain emergency intervention and ventilation equipment. The surface level structures will include a ventilation stack approximately 12 metres high.

- 13.4.7 The ES shows an illustrative over-site development in place at Hanbury Street. The illustration shows a development of between two storeys and five storeys. Construction of this type of over-site development would take approximately 19 months including internal fit-out; it would be feasible to start construction of over-site development of this type up to 20 months before the operation of the first revenue service.

Enabling Works

- 13.4.8 Demolitions which will be required to accommodate the works at Hanbury Street will comprise:
- 68-80 Hanbury Street;
 - Britannia House at 80-102 Hanbury Street; and
 - Ground floor rear extensions of 63, 65 and 67 Princelet Street.

Temporary Works

- 13.4.9 The construction of Hanbury Street shaft, including fit out and commissioning and construction of the temporary tunnel to Pedley Street and the Pedley Street temporary shaft will be carried out over a total period of four years and eight months. The majority of surface construction works at the Hanbury Street site will be carried out during the first 18 months of construction prior to the launch of the tunnel boring machines. After this point, the majority of surface construction works including servicing of the twin-bore tunnelling works will take place from the Pedley Street site.
- 13.4.10 For the construction of the Hanbury Street shaft, works will be carried out from a worksite that will occupy an area between Hanbury Street, Spelman Street and Princelet Street, abutting the junction with Spital Street. Access to the site will be from Whitechapel Road via Greatorex Street and Hanbury Street. Egress will be via Spital Street and Buxton Street to Vallance Road. A section of Buxton Street currently closed to traffic will be reopened to enable access for construction traffic only to Vallance Road.
- 13.4.11 At Hanbury Street, during the first 18 months of construction (involving the construction of the Hanbury Street shaft, the Pedley Street temporary shaft and the temporary tunnel between Pedley Street and Hanbury Street), the removal of excavated material and the delivery of construction materials will be by road. Once the Hanbury Street shaft, the Pedley Street temporary shaft and the temporary tunnel excavation has been completed and the TBMs launched, all removal of excavated material and delivery of construction materials will be via the temporary tunnel and the Pedley Street temporary shaft to minimise lorry movements at Hanbury Street.
- 13.4.12 Lorries accessing the Hanbury Street worksite will peak at approximately 27 lorries per day over a period of about 11 months.

Significant extant planning permissions & proposals

- 13.4.13 There are no significant extant planning permissions for development in this location.

Assessment of Impacts

Transport & Traffic Management

- 13.4.14 The Crossrail proposals accord with Policies T1 and ST27 of the saved UDP which encourages improvements and extensions to rail and underground services provided they are not harmful to the amenity of residents or otherwise damaging to the environment (policy T1).
- 13.4.15 The lorry routes for the Hanbury Street site have been subject of much discussion with Council Officer and members, with various options considered. The Crossrail ES concludes that use of the proposed routes by construction traffic is not predicted to give rise to any significant impacts for road users, pedestrians or cyclists. The proposals will therefore accord with the general intent of the saved and emerging UDP policies on traffic and pedestrian management.
- 13.4.16 There will be no adverse permanent significant impacts.

Amenity (e.g.: Noise, Vibration, Air Quality)

- 13.4.17 As explained in the Tower Hamlets-wide section above, temporary significant residual construction noise impacts are contrary to planning policy. A number of properties in the following locations will be affected by such impacts: -
- § Hanbury Street;
 - § Princelet Street;
 - § Vollasky House
- 13.4.18 The Crossrail ES states that no significant residual permanent noise or vibration impacts are predicted to occur.
- 13.4.19 No significant impacts on air quality are predicted to occur as a result of construction or operational activities.
- 13.4.20 The Crossrail ES states that there will be no significant impact on air quality therefore the proposals do not conflict with policy ENV7 of the emerging UDP.
- 13.4.21 The Crossrail ES has concluded that there will be temporary and permanent significant impacts on visual amenity for residents in the vicinity of Hanbury Street. This is contrary to policies HSG15 of the saved UDP and policy ENV1 of the emerging UDP. Both these policies seek to restrict development that will have an adverse impact on residential amenity. The over-site development, when it proceeds, will mitigate or reduce the visual amenity impact in this location.

Design

- 13.4.22 The proposals do not accord with the design requirements of Policy DEV1 (saved UDP) and policies UD1 and UD2 of the emerging UDP. These policies require development to relate to the surrounding area, in particular responding to desirable elements of the existing character including the continuity of street frontages, building lines, roof lines and street patterns.

Furthermore, the policies require high quality architectural solutions that are visually attractive.

- 13.4.23 It is likely that these impacts can be reduced or mitigated through the provision of a replacement building.

Historic Environment

- 13.4.24 The Hanbury Street Vent Shaft lies within the Fournier Street Conservation Area. Development is expected to preserve or enhance the character and appearance of conservation areas and their settings (policy DEV25 saved UDP, policy UD22 emerging UDP).
- 13.4.25 The Hanbury Street proposals involve the demolition of buildings within a conservation area. Policy DEV28 of the saved UDP (UD23 emerging UDP) states that proposals for the demolition of buildings in Conservation Areas will be assessed against a number of criteria including the desirability of preserving the character or appearance of the area; the condition of the building; and the suitability of any proposed replacement building.
- 13.4.26 The Crossrail ES considers that the existing buildings do not positively contribute and indeed detract from the character and appearance of the conservation area. Indeed, 68-80 and 80-102 Hanbury Street make a negative contribution to the Conservation Area. Whilst 63-65 Princelet Street is of the same mass and scale as the general line of buildings in Princelet Street, since it has been largely altered it makes only a neutral contribution to the conservation area. Since the existing buildings do not positively contribute to the character and appearance of the conservation area their demolition is not contrary to policy UD23 of the emerging UDP. This is because the existing buildings make a negative and neutral contribution to the character and appearance of the conservation area.
- 13.4.27 However, the proposals are contrary to policy UD22 of the emerging UDP which seeks to ensure that new development in conservation areas respects the fabric and appearance of its setting.
- 13.4.28 The Crossrail ES considers that the proposals for the operational development will not have an impact on the character and appearance of the conservation area as a whole since the site lies on the edge of the conservation area, adjacent to an area of post-war construction, and the integrity of the conservation area as a whole will be substantially retained.
- 13.4.29 Notwithstanding the above, the Crossrail ES concludes that there will be an adverse impact on the character of the local townscape contrary to policies DEV25 of the saved UDP and policy UD22 of the emerging UDP.
- 13.4.30 It is likely that the impacts can be reduced or mitigated through the provision of a replacement building.

Land Use

- 13.4.31 The proposals would result in the loss of employment uses without replacement contrary to policy EMP2 of the saved UDP and policy EMP1 of the emerging UDP.
- 13.4.32 It is anticipated that in accordance with local planning policies replacement development would be required to include residential and employment uses to mitigate as far as possible the conflict with these policies.

13.5 Pedley Street Temporary Access Shaft and Mile End Conveyor Corridor Worksites (Windows C8 and C8A)

Significant Characteristics of Site and Surrounding Area

- 13.5.1 The proposed temporary shaft is located on disused railway land to the south of the GEML railway and directly north of Pedley Street.
- 13.5.2 The site is characterised by the railway viaduct of the GEML to the north. It is a mixed use area with business units in the railway viaducts in the north and residential properties to the south and west of the site.
- 13.5.3 The site comprises a narrow strip of land to the south of the railway corridor running in an easterly direction to Mile End Sand sidings. This land is part of the railway and is disused.
- 13.5.4 The conveyor corridor is centred on the open space of Meath Gardens and Mile End Park, which are surrounded by largely residential areas. (see figure 15.2 above for route window C8).

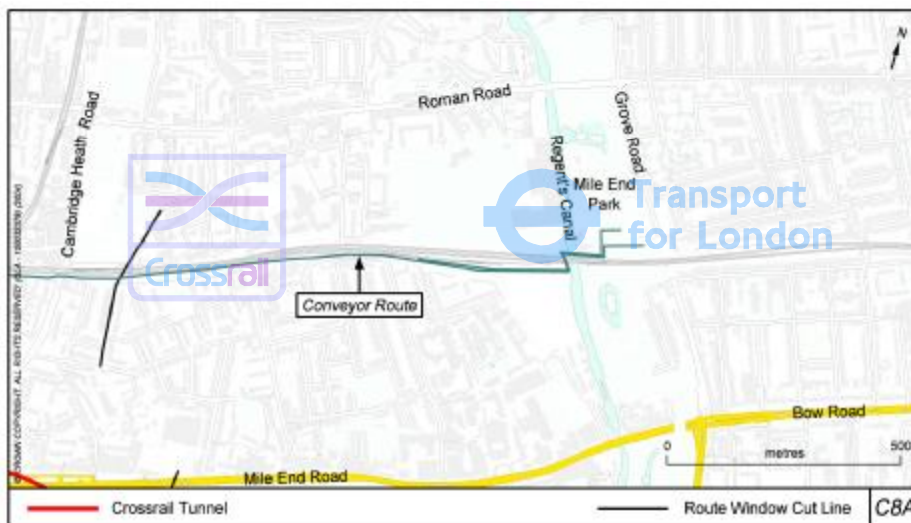


Figure 15.3: Location of worksites within route window C8A

Overview of proposals

- 13.5.5 The Pedley Street temporary access shaft is required to serve the main tunnel drivers from Hanbury Street Shaft with tunnel lining segments, and the removal of tunnel spoil. These two items are supplied/removed from the Pedley Street temporary working site via a surface rail connection. Tunnelling labour access is also envisaged to be from this location, and thus the Pedley Street shaft is required to facilitate the following:
 - Ø Tunnel lining segments (in);
 - Ø Tunnel spoil (out);
 - Ø Tunnel labour (in/out).

- 13.5.6 The temporary Mile End conveyor will run along the south side of the existing railway corridor. It will be used to carry excavated material, removed through the Pedley Street temporary shaft, to Mile End (Devonshire Street) sidings and a holding area located within part of Mile End Park.

Permanent Works

- 13.5.7 No permanent works will remain on completion of construction. The conveyor will be dismantled on completion of the works.

Enabling Works

- 13.5.8 Demolitions which will be required to accommodate the works at Pedley Street and Mile End conveyor will comprise:

- Part of the disused viaduct between Pedley Street and the active GEML lines; and
- Globe New Furniture (Globe Road).

Temporary Works

- 13.5.9 The Pedley Street works will be carried out over a period of four years and eight months.
- 13.5.10 All material deliveries to the Pedley Street site will be by road, via Vallance Road. During the first 18 months of construction, while the Pedley Street temporary shaft and temporary tunnel are being constructed, excavated material (from the temporary shaft and temporary tunnel) will be taken away by road from Pedley Street. After this period the temporary tunnel and Pedley Street temporary shaft will be used to remove excavated material generated from the twin-bore tunnels at Hanbury Street. Once the material has been conveyed to Pedley Street from Hanbury Street via the temporary tunnel it will be removed via conveyor to Mile End (Devonshire Street) sidings for onward transport by rail.
- 13.5.11 Generally approximately 12 lorries per day will access the Pedley Street worksite during construction works. Approximately 30 lorries per day will access the worksite during the peak construction period, spanning about nine months.
- 13.5.12 The Sand End sidings site will be accessed from the A11 Mile End Road via Globe Road and Bancroft Road with egress via Bancroft Road. The worksite will be served by five lorries a day during two peak periods of a month each and by two per day at other times.
- 13.5.13 The Mile End Park excavated materials handling site will be located within Mile End Park and accessed directly off Grove Road via a new access point. The worksite will be served by 120 lorries a day during the six month peak construction period and by 40 per day at other times. In the case of the excavated material from Whitechapel station being taken directly to landfill from the worksites, lorry numbers will be significantly reduced.

Significant extant planning permissions & proposals

- 13.5.14 There are no relevant planning permissions or proposals in the vicinity of the works site.

Assessment of Impacts

Transport & Traffic Management

- 13.5.15 The borough wide assessment above states that the Crossrail proposals accord with Policy T1 of the adopted UDP which encourages improvements and extensions to rail and underground services provided they are not harmful to the amenity of residents or otherwise damaging to the environment.
- 13.5.16 The Crossrail ES concludes that use of the proposed routes by construction traffic is not predicted to give rise to any significant impacts for road users, pedestrians or cyclists. The proposals will therefore comply with policies ST30 of the saved UDP and SP11, TRN5 and 7 of the emerging UDP.

Amenity (e.g.: Noise, Vibration, Air Quality)

- 13.5.17 After the mitigation measures set out in Appendix B1 of the Crossrail ES there are no significant residual adverse construction noise impacts at the Pedley Street worksite.
- 13.5.18 However, the Pedley Street to Mile End Conveyor worksite will result in temporary significant construction noise impacts that will affect the following properties and is contrary to policy: -
- § Brancaster House;
 - § Longer Road;
 - § London Hospital; and
 - § University accommodation
- 13.5.19 The Crossrail ES states that no significant residual permanent noise or vibration impacts are predicted to occur at the Pedley Street or the conveyor worksites.
- 13.5.20 No significant impacts on air quality are predicted to occur as a result of construction or operational activities.
- 13.5.21 The Crossrail ES has concluded that there will be temporary significant impacts on visual amenity for residents in the vicinity of Pedley Street. This is contrary to policies HSG15 of the saved UDP and policy ENV1 of the emerging UDP. Both these policies seek to restrict development that will have an adverse impact on residential amenity.

Historic Environment

- 13.5.22 The Crossrail ES states that the Pedley Street worksite has high potential for historic remains of a 1839-40 Eastern Counties Railway Viaduct. Construction of the access shaft is likely to require demolition of a section of viaduct. Demolition will be undertaken carefully and where practicable will

cease if well preserved if elements of the viaduct are encountered, to allow preservation in-situ. Where the condition of the viaduct is incapable of preservation in-situ remains will be subject of archaeological recording.

- 13.5.23 The proposals are therefore not in conflict with policies DEV42, 43, 44 and 45 of the saved UDP and UD16 of the emerging UDP.

Natural Environment

- 13.5.24 The Pedley Street site is located both within and adjacent to a site of nature conservation importance (SNCI). The saved UDP states that development that harms an SNCI should not be permitted (Policy DEV57). Policies SP17 and ENV15 of the emerging UDP similarly seek to protect nature conservation and bio-diversity.
- 13.5.25 The Crossrail ES states that the proposed works will require land take of around 1 hectare from the eastern part of the Spitalfields Viaduct Site of Borough Importance. Whilst the ecological value of this site has diminished, it concludes that its partial permanent loss, added to a temporary loss will constitute a significant impact given the paucity of semi-natural vegetation in the vicinity.
- 13.5.26 The proposals are therefore contrary to policies DEV57 of the adopted UDP and SP17 and ENV15 of the emerging UDP.
- 13.5.27 The use of part of Mile End Park for a spoil handling facility will result in significant temporary landscape impacts including the removal of mature and semi-mature trees and this is contrary to policy ENV15 of the emerging UDP even though there will be no significant ecological impact. It is likely that this conflict with policy can be reduced or mitigated at a later stage when the detailed design of the re-instatement scheme is agreed with London Borough of Tower Hamlets.

Open Space and Recreation

- 13.5.28 Mile End Park, which is designated Metropolitan Open Land (MOL), will be used for the temporary stockpiling of spoil and will be served by a section of the Pedley Street conveyor, which would pass along the western side of the climbing centre.
- 13.5.29 The proposals for the conveyor and spoil handling site will therefore create temporary conflicts with a number of planning policies. The use of part of Mile End Park as a spoil handling area is contrary to saved policy OS6 and emerging policy ENV25 as it is not an acceptable use for MOL.
- 13.5.30 Upon completion of the works, the park will be fully restored and there will be no permanent conflict with planning policy.

Land Use

- 13.5.31 Part of the Pedley Street worksite falls within a site allocation for Bishopsgate East for a mix of residential and commercial uses in the emerging UDP. The Pedley Street Shaft is a temporary structure which will facilitate removal of excavated material. Once construction is complete the site will be reinstated and made available for future development. Therefore, there is no permanent conflict with the UDP allocation.

13.6 Whitechapel Station (Window C8)

Significant Characteristics of Site and Surrounding Area

- 13.6.1 The area around Whitechapel Crossrail station and the Durward Street shaft are characterised mostly by retail and educational uses. The Royal London Hospital is located on the south side of the A11 Whitechapel Road across from Whitechapel Station.
- 13.6.2 Whitechapel station lies in a busy commercial area and serves the District line and East London Line. The site is partly located within a District Core Shopping Area.
- 13.6.3 The principal thoroughfares in the locality, Whitechapel Road, Cambridge Heath Road and Mile End Road are heavily trafficked and generally high noise levels and poor air quality prevail.
- 13.6.4 The site is in the Whitechapel Market Conservation Area. Nearby the Albion Brewery is a listed building and the Blind Beggar pub is classified as being of local interest.

Overview of proposals

- 13.6.5 A new station is proposed at Whitechapel with an interchange concourse beneath Durward Street and, integrated with it, a shaft structure.

Permanent Works

- 13.6.6 Crossrail will construct a new station to provide interchange with the District line and East London line and in the 2016 baseline the Metropolitan line replacing the current Hammersmith & City services. Whitechapel Station will also improve transport links to the local area, which is identified as an Opportunity Area in the Mayor's London Plan. The new station will be constructed between Court Street and Cambridge Heath Road.
- 13.6.7 Three scenarios were assessed for ticket halls at Whitechapel Station. The preferred solution is the first, because this performs best in transport terms. However, as is set out below it depends on further work by London Underground and possibly a Transport and Works Act Order to allow the London Underground works, in these circumstances the Crossrail project cannot rely on scenario one going ahead and has assessed scenarios two and three. All three scenarios can be constructed, subject to the London Underground works, under the powers in the Bill.
- 13.6.8 Scenario 1 – a new western ticket hall would be provided over the District line east of Court Street. The western end of the Crossrail platforms will be accessed from this ticket hall via the District line platforms, then escalators to an interchange concourse within a box under Durward Street providing interchange to the District line and the East London line. A further bank of escalators will descend from this interchange concourse to the Crossrail platforms. This western ticket hall will require demolition of London Underground accommodation over the District line and removal of three District line tracks; the northernmost and southern two (by London Underground). Removal of the District line tracks may require London

Underground to provide facilities for reversing trains at an alternative location, powers for which would need to be obtained by London Underground separately to the Bill, Ventilation, escape and EIP infrastructure will be constructed at the east end of the Crossrail platforms to the west of Cambridge Heath Road at the junction with Whitechapel Road. This scenario is currently the preferred approach.

- 13.6.9 Two further scenarios have been developed which may be constructed depending on the timing of the London Underground track works.
- 13.6.10 Scenario 2 – a new eastern ticket hall would be provided, including the same ventilation, escape and EIP infrastructure, to the west of Cambridge Heath Road at the junction with Whitechapel Road. The eastern end of the Crossrail platforms would be accessed from this street level ticket hall via a single flight of escalators. Subsequently, a new western ticket hall would be constructed over the District line east of Court Street as in scenario one. The two ticket halls could then both operate, or the eastern ticket hall would be closed and the site simply used for emergency escape and ventilation. This will depend on the passenger levels at the relevant time and as predicted.
- 13.6.11 Scenario 3 – a new eastern ticket hall would be provided, including ventilation, escape and EIP infrastructure, to the west of Cambridge Heath Road at the junction with Whitechapel Road as in the first part of scenario two. The eastern end of the Crossrail platforms would be accessed from this street level ticket hall via a single flight of escalators. This would be the least preferable option but could go ahead without the London Underground works.
- 13.6.12 A shaft at Durward Street would be required for all three scenarios. This will include the Whitechapel station interchange concourse (providing access to London Underground East London line platforms) escape, EIP and ventilation equipment at the west end of the Crossrail platforms. The shaft is formed by a below-ground box of irregular shape. This will be constructed within an area of land known as Essex Wharf and will require the demolition and subsequent reinstatement of the caretaker's property at Swansea school.
- 13.6.13 The different project scenarios will result in no different planning policy conclusions to the scheme assessed in this report.

Temporary Works

- 13.6.14 Demolitions which will be required to accommodate the works at Whitechapel station will comprise:
- a conservatory to the Blind Beggar pub and an adjacent wall at the Sainsbury's Car Park worksite;
 - the school caretaker's house at the Essex Wharf worksite; and
 - London Underground signalling accommodation over District Line south of Durward Street.

- 13.6.15 The construction of the station at Whitechapel will be undertaken over a period of four years and six months.
- 13.6.16 For the construction of Whitechapel station, works will be carried out from the following worksites:
- *Sainsbury's Car Park Worksite* – This will be situated at the junction of Whitechapel Road and Cambridge Heath Road. Pedestrian routes will be diverted. Entry to the site will be from Cambridge Heath Road; exit will be onto Brady Street. Approximately 70 lorries per day will access the Sainsbury's car park worksite during the peak construction period, spanning about five months. It is unlikely that this will vary significantly if construction variant 1, 1A or 2 is implemented.
 - *Durward Street Worksite* – The western part of the site will temporarily occupy the carpark of a sports centre. The eastern part of the site will comprise Essex Wharf, an electrical substation and the grounds of Swanlea School.
 - *District Line Worksite* – This will be located on Durward Street and include an area used as a bus stand and turning area. A combined total of about 40 lorries per day will access the worksite during the peak construction period, spanning about two months. It is unlikely that this will vary significantly if construction variant 1, 1A or 2 is implemented.
- 13.6.17 All materials going to and from the Whitechapel station worksites will be transported by road. The majority of materials will be delivered directly to site owing to the limited storage space available. However, a potential lorry holding area for the Hanbury Street and Whitechapel Station worksites has been identified on Burdett Road at Mile End.
- 13.6.18 Access and egress to and from all the Whitechapel station worksites will be via the A11 (Whitechapel Road/Mile End Road) onto either Cambridge Heath Road, for the Sainsbury's car park worksite, or onto Brady Street and Durwood Street for access to the Durwood Street worksite. A section of Durwood Street currently closed will be re-opened to facilitate the works. Egress from all sites will be via Vallance Road.
- 13.6.19 There are likely to be restrictions on pedestrians and traffic access to and around all the Whitechapel station worksites during the construction period.

Significant extant planning permissions & proposals

- 13.6.20 There are no significant extant planning permissions for development in this location

Assessment of Impact

Transport & Traffic Management

- 13.6.21 The borough wide assessment above states that the Crossrail proposals accord with Policy T1 of the adopted UDP which encourages improvements and extensions to rail and underground services provided they are not harmful to the amenity of residents or otherwise damaging to the environment.

- 13.6.22 Passengers using Whitechapel station will benefit from improved journey times, increased accessibility and interchange opportunities. This accord with saved policy T1 (Rail and Underground Services) and emerging TRN2 (Public Transport Schemes).
- 13.6.23 Policy T5 of the adopted UDP seeks improvements to public interchange facilities. The proposals incorporate connections between Crossrail and the East London Line, District and Hammersmith and City Lines.
- 13.6.24 Crossrail construction traffic is likely to cause localised traffic congestion and associated driver delay on both Brady Street and Durward Street. It is probable that the congestion and delays can be partially mitigated through regulating vehicles accessing and egressing local sites but a significant impact will remain. The proposals are therefore in conflict with the general intent of saved and emerging UDP's traffic management and pedestrian policies. Prior to construction, the nominated undertake will agree with the local authority a construction traffic management plan which will seek to minimise disruption on the highway network.
- 13.6.25 No other significant traffic and transport impacts will occur.

Amenity (e.g.: Noise, Vibration, Air Quality)

- 13.6.26 As explained in the Tower Hamlets-wide section above, temporary significant residual construction noise impacts are contrary to planning policy. Swanlea School on Durward Street will be affected by such impacts.
- 13.6.27 The Crossrail ES states that no significant residual permanent noise or vibration impacts are predicted to occur.
- 13.6.28 No significant impacts on air quality are predicted to occur as a result of construction or operational activities.
- 13.6.29 The Crossrail ES states that there will be no significant impact on air quality therefore the proposals do not conflict with policy ENV7 of the emerging UDP.
- 13.6.30 The Crossrail ES states that there will be no significant impact on air quality therefore the proposals do not conflict with policy ENV7 of the emerging UDP.

Historic Environment

- 13.6.31 The Crossrail ES states that construction of the western ticket hall, together with the construction site on the current Sainsbury's car park (on Cambridge Heath Road) will have a significant adverse impact temporarily on both local townscape character and on the Whitechapel Market Conservation Area as a whole. The permanent works at Whitechapel Station will not result in any adverse impact on townscape quality, character or appearance of the conservation area.
- 13.6.32 The proposals will therefore temporarily conflict with policies DEV25 and DEV28 of the saved UDP and policy UD22 of the emerging UDP. There is no permanent conflict with policy.

- 13.6.33 The Crossrail ES states that the Whitechapel worksites have potential for historic remains of varying importance. It concludes that the potential resources are unlikely to be of sufficient importance to warrant preservation in-situ, and that preservation by record will be undertaken.
- 13.6.34 The Crossrail ES contains mitigation measures that will result in no residual permanent impacts. The proposals are therefore not in conflict with policies DEV42, 43, 44 and 45 of the saved UDP and UD16 of the emerging UDP.

Land Use

- 13.6.35 Whitechapel is identified as a regeneration area in the UDP and an Opportunity Area in the London Plan (policies 2A.2 and 5C.2). Opportunity Areas have been identified on the basis that they are capable of accommodating substantial employment growth and new homes. The Whitechapel/Aldgate OA can accommodate 14,000 new jobs and 700 new homes in the period to 2016. The improvement of public transport in the area therefore contributes positively to this policy objective.
- 13.6.36 The proposals for a new Whitechapel Station, on the fringe of the district centre (policy S3 adopted UDP) and primary retail frontage (TC3 emerging UDP), contribute to the vitality and viability of the shopping area through increased accessibility and footfall in accordance with Policy TC2 of the emerging UDP.
- 13.6.37 There is a policy presumption to protect/retain high quality local public services and social facilities (policy ST49 adopted UDP, SP8 emerging UDP). The Durward Street worksite will result in the loss of land at Swanlea School including the caretakers house. This will be re-instated on completion of the works and there will be no permanent conflict with planning policy.

13.7 Stepney Green (Window C9)

Significant Characteristics of Site and Surrounding Area

- 13.7.1 The Stepney Green Shaft site is located in a narrow corridor of Stepney Green Park between the all weather sports ground to the west, Garden Street and Stepping Stones City Farm to the east. The city farm includes 19th century Baptist chapel and a former congregational church. Part of the city farm is used for grazing.
- 13.7.2 The park lies in a predominately residential area. It is characterised by a mix of post-war housing estates, listed terraces and supporting community buildings including schools, places of worship and playgrounds.
- 13.7.3 The site itself forms part of the north-eastern end of Stepney Green. The landscaped area of Stepney Green largely comprises sports pitches. The enclosed all-weather/astro-turf pitches are located to the west of the site.

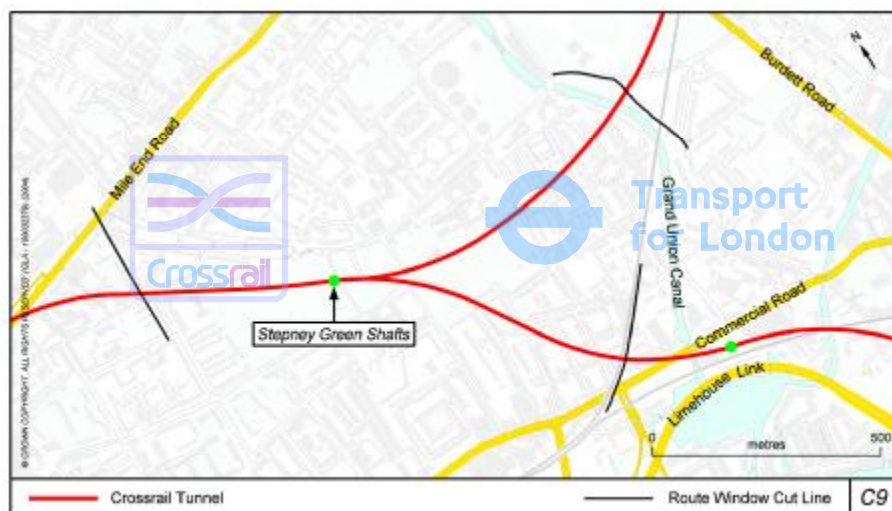


Figure 15.4: Location of worksites within route window C9

Overview of proposals

- 13.7.4 The Stepney Green shaft will provide intervention, ventilation and evacuation. The design consists of separate shafts located over each of the tunnels with a connecting two level basement box located immediately below ground.
- 13.7.5 There are proposals to raise the ground levels at this site in order to protect possible archaeological remains.

Permanent Works

- 13.7.6 To comply with safety requirements, Crossrail will construct shafts in this area to provide facilities for emergency intervention, escape and ventilation. Two 16m diameter shafts will be constructed on Stepney Green,

immediately west of Garden Street. EIP, ventilation and escape facilities will be provided. Two 7.5 m high surface structures will be constructed along with an area of hard standing. Beneath the surface, a concrete box will contain ventilation equipment.

Enabling Works

- 13.7.7 Enabling works, taken prior to the main construction works, will involve utilities diversions, which will take around six months. No demolitions will be required for construction of the Stepney Green shaft.

Temporary Works

- 13.7.8 The construction, including fit out and commissioning of Stepney Green shaft will take approximately four years and 3 months.
- 13.7.9 Works will be carried out from a section of Stepney Green Park, bordering Garden Street. The ruins of Worcester House will be within the worksite area and will be protected during construction.
- 13.7.10 The all-weather sports pitches to the west of the proposed shafts will be acquired temporarily as an additional worksite required for offices and spoil handling.
- 13.7.11 Transportation routes servicing the Stepney Green area are restricted to road only. Lorries will access the worksite from the A11 Mile End Road via White Horse Lane and exit via Stepney Green.
- 13.7.12 Minor road modifications will be required at Stepney Green (road) to remove traffic calming measures at the north eastern end of the sports field to allow safe passage for lorries. The closure of Garden Street will require diversion traffic along either Stepney High Street (to the east) or Jamaica Street (to the west). Existing traffic calming on Stepney Green may need to be modified to facilitate construction traffic.

Significant extant planning permissions & proposals

- 13.7.13 There are no relevant planning permissions or proposals affecting this location.

Assessment of Impacts

Transport & Traffic Management

- 13.7.14 The Crossrail proposals accord with Policy T1 of the saved UDP which encourages improvements and extensions to rail and underground services provided they are not harmful to the amenity of residents or otherwise damaging to the environment .
- 13.7.15 The Crossrail ES concludes that use of the proposed routes by construction traffic is not predicted to give rise to any significant impacts for road users, pedestrians or cyclists. The proposals will therefore comply with the general intent of policies ST30 of the saved UDP and SP11 and TRN5 of the emerging UDP.
- 13.7.16 There will be no adverse permanent significant impacts.

Amenity (e.g.: Noise, Vibration, Air Quality)

- 13.7.17 As explained in the Tower Hamlets-wide section above, temporary significant residual construction noise impacts are contrary to planning policy. A number of properties around Stepney Green will be affected by such impacts
- 13.7.18 The Crossrail ES states that no significant residual permanent noise or vibration impacts are predicted to occur.
- 13.7.19 No significant impacts on air quality are predicted to occur as a result of construction or operational activities.

Historic Environment

- 13.7.20 The Stepney Green Conservation Area lies to the north of the works site. Policy DEV29 of the saved UDP (UD22 emerging UDP) states that development adjacent to conservation areas should where possible avoid detriment to its character or appearance. The Crossrail ES reports no temporary or permanent impacts on the character and appearance of the conservation area.
- 13.7.21 The Grade II listed Stepney Green Clock Tower and a Grade II listed drinking fountain are on the north side of Stepney Green Sports pitch. The Crossrail ES identifies significant townscape and built heritage impacts during the construction including impacts on the setting of the listed tower and drinking fountain. This is contrary to Policy DEV39 of the saved UDP and UD17 of the emerging UDP.
- 13.7.22 The ventilation shaft structure will be located within a landscaped setting at the edge of Garden Street. The Crossrail ES concludes that there will no significant permanent landscape or built heritage impacts and as such the proposals comply with UDP design policies.
- 13.7.23 An Area of Archaeological Importance or Potential is sited adjacent to the site (policies DEV42, 43, 44 and 45 saved UDP, UD16 emerging UDP). The Crossrail ES identifies below ground remains of the 16th Century Worcester House as being present east of Garden Street and states that there is a high potential for other remains to be present. The group of remains comprising Worcester House, are of high importance.
- 13.7.24 The Crossrail ES states that the box to contain the basement structures associated with the shaft would completely remove archaeological deposits including, potentially, remains associated with Worcester House. The mitigation measures contained in the Crossrail ES seek to minimise the impact on the remains. In this case a combination of preservation *in situ* and preservation by record will provide effective mitigation and no significant impact will occur. The nominated undertaker will continue to work with London Borough of Tower Hamlets to minimise these impacts through detailed design of the scheme and in agreeing appropriate control over construction activities. The proposals therefore accord with policy.

Natural Environment

- 13.7.25 The proposals require the temporary use of part of Stepping Stones Farm (Grade II Site of Borough Importance) as a work site. There is a presumption in favour of protecting Sites of Nature Conservation Importance (DEV57 saved UDP, SP17, ENV15 emerging UDP). Policy DEV62 of the

saved UDP states that destruction or adverse effects on SNCIs will require mitigation or replacement. The Crossrail ES concludes that the removal of scrub, trees and wasteland plant vegetation is not a significant impact in ecological terms and the proposals are not in conflict with UDP bio-diversity policies.

- 13.7.26 On completion of the works the city farm will be re-instated including the creation of species rich grassland to compensate for loss of existing pastures. This is likely to be a long-term benefit. The proposals therefore comply with policies DEV58 and DEV62 of the saved UDP and policies ENV15 and ENV16 of the emerging UDP.
- 13.7.27 Policy DEV15 of the saved UDP and policy ENV18 emerging UDP seeks the retention or replacement of existing mature trees. The trees and other vegetation lost is not a significant ecological impact but the loss of trees is contrary to policy. It is likely that this conflict with policy can be reduced or mitigated at a later stage when the detailed design of the operational building and re-instatement scheme is agreed with London Borough of Tower Hamlets.

Recreation and Open Space

- 13.7.28 The proposals will result in the loss of leisure and recreational facilities (including temporary use of all weather sports pitch and part of Stepping Stones Farm (City Farm) which have recreational, amenity and educational value. This loss is a significant temporary impact. This is contrary to policy OS7 of the saved UDP and policy ENV26 of the emerging UDP. The emerging UDP states that the entire Borough is very deficient in open space and as such only development that is ancillary to the function of open space would normally be permitted (policy ENV26).
- 13.7.29 The loss of recreational space will be temporary with the exception of a small area displaced by the permanent vent structures. The proposals will re-instate the all-weather pitches, part of the open space and the city farm and therefore there is no permanent conflict with planning policy.

13.8 Mile End Park (Window C12)

Significant Characteristics of Site and Surrounding Area

- 13.8.1 The site forms part of the southern end of the Mile End Park which continues northwards to Victoria Park.
- 13.8.2 The Mile End Park shaft site is located to the south of the Mile End Stadium. The site lies to the west of Burdett Road (A1205) with the London Tilbury Southend railway viaduct to the south. The arches to the LTS viaduct are largely occupied by a variety of uses including leisure space connected with the park.

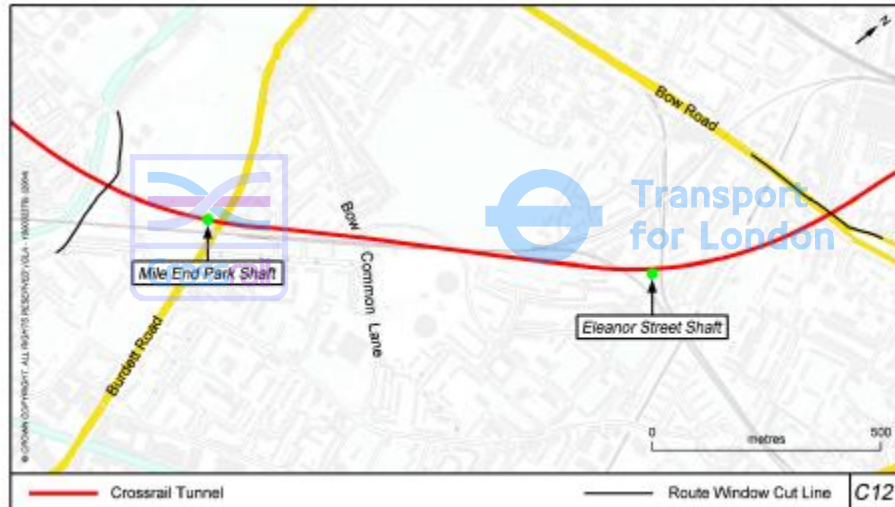


Figure 15.5: Location of shafts within route window C12

- 13.8.3 Mile End Park is a leisure and sporting venue, with an international standard athletics stadium.

Overview of proposals

- 13.8.4 An escape, intervention and ventilation shaft are proposed.

Permanent Works

- 13.8.5 To comply with safety requirements, Crossrail will construct a 16 m diameter shaft in the southeast corner of Mile End Park bounded by Burdett Road and the mainline railway viaduct that carries the line to and from Fenchurch Street. The shaft will have escape, intervention and ventilation facilities. On the surface, a structure 7 m high and 45 m square will be constructed.

Temporary Works

- 13.8.6 The construction including fit out and commissioning of Mile End Park shaft will be undertaken over a period of about three and nine months.
- 13.8.7 At the Mile End Park worksite, works will be carried out from the southeastern corner of Mile End Park. The site is bounded by the park to the north, a railway viaduct to the south, Mile End Stadium to the west and Burdett Road to the east.
- 13.8.8 All materials going to and from the Mile End Park worksite will be transported by road. Lorries will access and exit the worksite from Burdett Road (A1205) via the new Mile End Stadium access road currently being constructed.
- 13.8.9 On average approximately five lorries per day will access the Mile End Park worksite during construction works. Approximately 24 lorries per day will access the worksite during the peak construction period, spanning about six months.

Significant extant planning permissions & proposals

- 13.8.10 Planning permission exists for new and improved sports facilities at the Mile End stadium and park. These works are under construction.

Assessment of Impacts

Transport & Traffic Management

- 13.8.11 Policy T1 and ST27 of the saved UDP encourage improvements and extensions to rail and underground services provided they are not harmful to the amenity of residents or otherwise damaging to the environment.
- 13.8.12 The Crossrail ES concludes that there will be no significant impacts during in construction or once operational. The proposals will therefore comply with the general intent of policies ST30 of the saved UDP and SP11 and TRN5 of the emerging UDP.

Amenity (e.g.: Noise, Vibration, Air Quality)

- 13.8.13 After the mitigation measures set out in Appendix B1 of the Crossrail ES there are no significant residual adverse construction noise impacts at these works sites.
- 13.8.14 The Crossrail ES states that no significant residual permanent noise or vibration impacts are predicted to occur.
- 13.8.15 No significant impacts on air quality are predicted to occur as a result of construction or operational activities.

Open Space and Recreation

- 13.8.16 The land required for the ventilation shaft is designated Metropolitan Open Land. There is a presumption against any new development in the MOL that would materially affect its open nature (policy OS6, saved UDP; policy ENV25, emerging UDP; policy 3D.9, London Plan).
- 13.8.17 The London Plan sets out the functions of MOL. These are protecting open space to provide a clear break in the urban fabric and contributing to the green character of London; protecting open space to serve the needs of Londoners outside their local area; and protecting open space that contains a feature or landscape of national and regional significance.
- 13.8.18 The ventilation shaft is inappropriate development because it does not support outdoor open space uses or contribute to the function of the MOL. As MOL is afforded the same level of protection as Green Belt (para. 3.249, London Plan), the proposals will be in significant conflict with planning policy. This policy conflict should be balanced with the substantial and long term benefits of the project which is supported by planning and transport policies at the national, regional and local level. Moreover, the nominated undertaker will work with London Borough of Tower Hamlets to minimise the impact of the vent shaft structure on the open nature of the park through the detailed design and landscaping.
- 13.8.19 Proposal 77 in the saved UDP proposes open space and leisure improvements, which should include improvements to the existing stadium and provision of new leisure facilities, at Mile End Park. Planning permission exists for these works and they are under construction.

13.8.20 The proposals will involve temporary loss of recreational and leisure space including a football pitch. The pitch will be re-instated on completion of the works, and as such this is not a permanent impact. This is contrary to policies ST38, ST49, OS7 of the saved UDP and SP20 and ENV26 of the emerging UDP.

13.9 Eleanor Street (Window C12)

Significant Characteristics of Site and Surrounding Area

- 13.9.1 The Eleanor Street shaft is located within the Bow Triangle bounded by three railway viaducts; the London Tilbury Southend railway viaduct to the south, the District Line viaduct to the north and the Gas Factory Curve to the west. (see figure 15.5 for location map)
- 13.9.2 Bow Triangle contains a business park which is connected to the western and a caravan park which is located to the east. The caravan park contains number of pitches.
- 13.9.3 Bow Triangle is currently accessed from Eleanor Street off Bow Road. It is relatively secluded because of the viaducts.
- 13.9.4 The Tomlins Grove Conservation Area is located to the north of the site and the Tower Hamlets Cemetery Conservation Area lies to the west of the works site. Both are physically separated by the railway viaducts.

Overview of proposals

- 13.9.5 A ventilation shaft is proposed with a hardstanding area for emergency assembly, emergency and maintenance vehicles.

Permanent Works

- 13.9.6 To comply with safety requirements, Crossrail will construct a 15 m diameter shaft within the eastern extent of the caravan park at the eastern end of Eleanor Street. The site is in an area of land bounded by LUL's District line and Network Rail's line to Fenchurch Street. Ventilation and emergency intervention facilities will be provided. A surface structure of 11 m height, 17.5 m width and 35.5 m length will be constructed and set within an area of hard standing for emergency and maintenance vehicles.

Temporary Works

- 13.9.7 The construction including fit out and commissioning of Eleanor Street shaft will be undertaken over a period of about three years and nine months.
- 13.9.8 At the Eleanor Street worksite works will be carried out from the current caravan park situated within the Bow Triangle Business Park. The site is bounded by the District line viaduct to the north, a mainline railway viaduct to the south, Rounton Street to the west and Eleanor Street to the east.
- 13.9.9 All materials incoming and outgoing associated with the Eleanor Street worksite will be transported by road. Lorries will access the worksite from the A11 Bow Road via Mornington Grove and Eleanor Street. A lorry holding area will be provided on Eleanor Street.
- 13.9.10 On average approximately three lorries per day will access the Eleanor Street worksite during construction works. Approximately 17 lorries per day will access the worksite during the peak construction period, spanning about two months.

Significant extant planning permissions & proposals

- 13.9.11 There are no significant extant planning permissions for development in this location

Assessment of Impacts

Transport & Traffic Management

- 13.9.12 The borough wide assessment above states that the Crossrail proposals accord with Policy T1 and ST27 of the saved UDP which encourages improvements and extensions to rail and underground services provided they are not harmful to the amenity of residents or otherwise damaging to the environment.
- 13.9.13 The Crossrail ES concludes that there will be no significant impacts during in construction or once operational. The proposals will therefore comply with the general intent of policies ST30 of the saved UDP and SP11 and TRN5 of the emerging UDP.

Amenity (e.g.: Noise, Vibration, Air Quality)

- 13.9.14 After the mitigation measures set out in Appendix B1 of the Crossrail ES there are no significant residual adverse construction noise impacts at these works sites.
- 13.9.15 The Crossrail ES states that no significant residual permanent noise or vibration impacts are predicted to occur.
- 13.9.16 No significant impacts on air quality are predicted to occur as a result of construction or operational activities.

Historic Environment

- 13.9.17 The Tomlins Grove Conservation Area lies to the north of the works site and the Tower Hamlets Cemetery Conservation Area lies to the west of the work site.
- 13.9.18 The Crossrail ES states that the area is a low quality townscape of low sensitivity to change and concludes that no significant townscape impacts will result either during construction or arising from the permanent vent shaft structure. The proposals do not conflict with Policy DEV29 of the saved UDP and policy UD22 of the emerging UDP which seek to protect the setting and character of conservation areas.

Land Use

- 13.9.19 The proposals will result in the permanent loss of the travellers' site. It is proposed to make a compensation payment to London Borough of Tower Hamlets to re-locate the site. Further discussions will be required to progress this proposal.
- 13.9.20 This loss is contrary to policies about travellers sites, HSG22 and HSG16 respectively. Policy HSG16 seeks to maintain existing provision and Eleanor Street is identified as part of that provision.

13.9.21 It is also contrary to London Plan policy 3A.11 which encourages Boroughs to retain existing travellers sites.

13.10 Lowell Street Shaft (Window C10)

Significant Characteristics of Site and Surrounding Area

13.10.1 The proposed site for the Lowell Street shaft is in Limehouse on an undeveloped site located on the corner of Commercial Road and Basin Approach (610 Commercial Road). The land is bounded by the DLR viaduct to the south and a disused railway viaduct to the east.

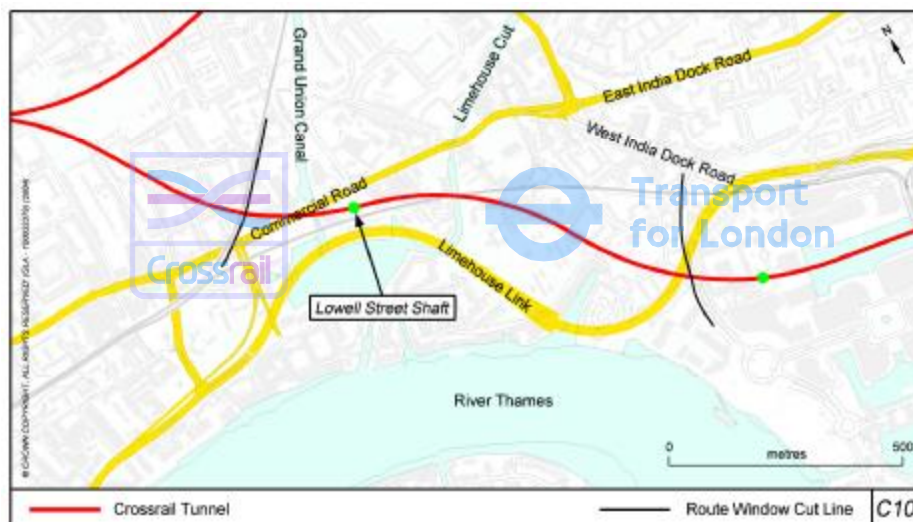


Figure 13.6: Location of Lowell Street shaft within route window C10

13.10.2 The site is currently being used as a temporary location for the site offices for Bellway Homes. In addition, a small metal fabricating company occupies a small portion of land, beneath an arch of the disused viaduct (622 Commercial Road).

13.10.3 A Grade II chimney (Regents Canal Dock Hydraulics Accumulator Tower) constructed in 1869 is located at the junction between the disused viaduct and the DLR viaduct towards the south east of the site. The disused viaduct is also Grade II listed. Other Grade II Listed buildings are the terraces of Georgian houses on the north side of Commercial Road (Nos. 683 to 691 and 699 to 709) and on the south side of Commercial Road to the west of the site (Nos. 604 to 608).

13.10.4 There are three conservation areas in close proximity to the site. The closest of these is the St Anne's Conservation Area, to the east of the disused viaduct but overlapping the site to include the listed chimney structure and the disused viaduct. The Lowell Street Conservation Area is to the north of the site across Commercial Road and includes two terraces of listed buildings and the disused railway bridge. Finally, York Square Conservation Area which is located to the west of the site and includes the Limehouse DLR station and part of the DLR viaduct.

- 13.10.5 The use of the surrounding land predominantly includes private and social housing, light industrial uses and community uses including schools, places of worship. Limehouse Marina and other residential developments are located in close proximity along the Thames.

Overview of proposals

- 13.10.6 A shaft for access for emergency intervention, passenger emergency escape, access for equipment replacement, overhaul and maintenance and ventilation equipment.

Permanent Works

- 13.10.7 To comply with safety requirements, Crossrail will require a shaft to be located in this area. An 18.8 m diameter shaft will be constructed on undeveloped land at the corner of Commercial Road and Basin Approach (at 610 Commercial Road). The site is bounded by the DLR viaduct to the south and a disused railway viaduct to the east. EIP, ventilation and escape facilities will be provided. The ventilation structures will be about 15 m in height. One approximately 25 m long surface structures will be constructed along with an area of hard standing. Beneath the surface, a concrete box will contain ventilation equipment.

- 13.10.8 The ES contains an illustrative plan and elevation of the site with illustrative over-site development in place at Lowell Street. The illustration shows a development of 26 m or ground plus six storeys. Construction of this type of over-site development would take approximately 18 months including internal fit-out; it would be feasible to start construction of over-site development of this type up to 27 months before the operation of the first revenue service.

Temporary Works

- 13.10.9 The construction including fit out and commissioning of Lowell Street shaft will be undertaken over approximately a four year period.
- 13.10.10 Construction of the Lowell Street shaft works will be carried out from an area of undeveloped land located at No. 610 Commercial Road, which is bounded by a DLR viaduct to the south and a disused railway viaduct to the east.
- 13.10.11 All materials going to and from the Lowell Street shaft worksite will be transported by road. Lorries will enter and leave from Commercial Road (A13). A lorry holding area will be provided on West India Dock Road
- 13.10.12 On average approximately 15 lorries per day will access the Lowell Street worksite during construction works. Approximately 50 lorries per day will access the worksite during the peak construction period, spanning about five months.

Significant extant planning permissions & proposals

- 13.10.13 There are no significant extant planning permissions for development in this location

Assessment of Impacts

Transport & Traffic Management

- 13.10.14 The borough wide assessment above states that the Crossrail proposals accord with Policy T1 and ST27 of the saved UDP which encourages improvements and extensions to rail and underground services provided they are not harmful to the amenity of residents or otherwise damaging to the environment.
- 13.10.15 The Crossrail ES concludes that there will be no significant impacts during in construction or once operational. The proposals will therefore comply with the general intent of policies ST30 of the saved UDP and SP11 and TRN5 of the emerging UDP.

Amenity (e.g.: Noise, Vibration, Air Quality)

- 13.10.16 As explained in the Tower Hamlets-wide section above, temporary significant residual construction noise impacts are contrary to planning policy. A number of properties in the following locations will be affected by such impacts: -
- § Regents Canal House; and
 - § Basin Approach
- 13.10.17 The Crossrail ES states that no significant residual permanent noise or vibration impacts are predicted to occur.
- 13.10.18 No significant impacts on air quality are predicted to occur as a result of construction or operational activities.

Historic Environment

- 13.10.19 The Crossrail ES concludes that there will be no significant impacts on any listed buildings or on the setting or quality of the adjacent Lowell Street and St Anne's Church Conservation Areas. The proposals therefore comply with policies DEV29(Setting of Conservation Areas) and DEV39(Setting of Listed Buildings) of the saved UDP and policies UD17(Setting of Listed Buildings) and UD22(Setting of Conservation Areas) of the emerging UDP.

Land Use

- 13.10.20 Two small businesses occupy land beneath the arches of the disused viaduct to the east of the site.
- 13.10.21 The proposals will result in the loss of employment uses without replacement contrary to policy EMP2 of the saved UDP and policy EMP1 of the emerging UDP.
- 13.10.22 It is anticipated that in accordance with local planning policies replacement development will be required to include employment uses to mitigate as far as possible the conflict with these policies.

13.11 Hertsmere Road Shaft (Window C11)

Significant Characteristics of Site and Surrounding Area

- 13.11.1 The Hertsmere Road shaft is located to the north of the main Canary Wharf development on an area of car park between the Cannon workshops on Cannon Drive and Hertsmere Road.

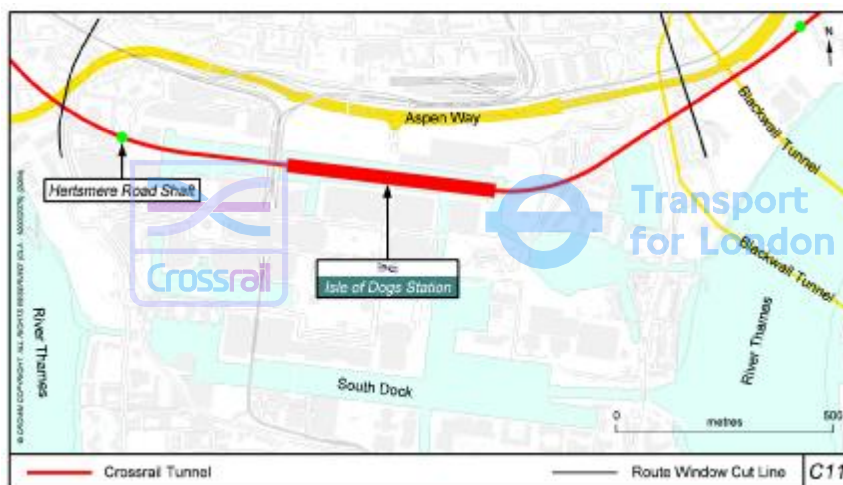


Figure 13.7: Location of stations and shafts in route window C11

- 13.11.2 The shaft site is located adjacent to and partly within the West India Dock Conservation Area which encompasses Cannon Workshops, Port East Apartments on West India Dock and several buildings along Westferry Road and Limehouse Link. The Conservation Area bisects the car park marginally south of its entrance on Hertsmere Road. To the east of Hertsmere Road is Hertsmere House, a modern four-storey office building. West India Dock lies to its east. (See figure 13.6 above for location)
- 13.11.3 There are several listed structures around Hertsmere Road, including the Port Authority Warehouses, Cannon Workshops, the Guard House and the former Port of London Authority Dock Master's Office.
- 13.11.4 Broadly, Hertsmere Road is in area of transition. There are substantial mainly high rise office developments to the south and east of the site at Canary Wharf, around Westferry Circus and at West India Quay. A number of substantial office, residential, hotel and leisure developments are under construction.

Overview of proposals

- 13.11.5 An intervention shaft for emergency services and maintenance personnel to access the running tunnels is proposed.

Permanent Works

- 13.11.6 To comply with safety requirements, Crossrail will construct a shaft in this area. A 9 m diameter shaft will be constructed on a car park between the

Cannon Workshops on Cannon Drive and Hertsmere Road. Emergency intervention facilities will be provided. At the surface, an 8 m high building will be constructed with a basement containing plant equipment. An area of hard standing will also be provided adjacent to the building along with a 30 space car park.

Enabling Works

- 13.11.7 Prior to the main construction period, enabling works will comprise general service diversions.
- 13.11.8 The demolition of Hertsmere House at 2 Hertsmere Road may be required as the foundations clash with the tunnel alignment. This is expected to be demolished as part of the works for the Columbus Tower development which received planning permission in 2004. If this development does not proceed then Crossrail will demolish this building.

Temporary Works

- 13.11.9 The works for the Hertsmere Road shaft will occur between the car parking area on Cannon Drive and the adjacent paved hard standing area. Materials going to and from the site will be transported by road. Lorries will enter the site from Cannon Drive (via Hertsmere Road) and exit onto Hertsmere Road. On average approximately three lorries per day will access the Hertsmere Road worksite during construction works. Approximately ten lorries per day will access the worksite during the peak construction period, spanning about five months.
- 13.11.10 The construction including fit out and commissioning of the Hertsmere Road shaft will take approximately four years.

Significant extant planning permissions & proposals

- 13.11.11 Planning permission was granted in 2004 for the redevelopment of Hertsmere House for a 63 storey mixed use tower. This development, known as Columbus Tower comprises offices, hotel, serviced apartments, retail and leisure.
- 13.11.12 There are undetermined planning applications on a number of large sites around West India Dock including North Quay.

Assessment of Impacts

Transport & Traffic Management

- 13.11.13 The borough wide assessment above states that the Crossrail proposals accord with Policy T1 of the saved UDP which encourages improvements and extensions to rail and underground services provided they are not harmful to the amenity of residents or otherwise damaging to the environment.
- 13.11.14 The Hertsmere Road shaft worksite will be located in an area of a private car park at the junction of Hertsmere Road and Cannon Drive, immediately to the north of Westferry Circus. There will be a loss of some 30 car parking spaces to form the worksite. Access will be from the A1261 Aspen Way via

Westferry Road and Westferry Circus (lower), Hertsmere Road and Cannon Drive. A lorry holding area for the worksite will be located on Cannon Drive immediately adjacent to the worksite.

- 13.11.15 The loss of private car parking is identified as a significant temporary traffic and transport impact in Crossrail ES. There are no planning policies that seek to protect existing car parking, and this loss does not appear to conflict with the general intent of UDP transport policies.
- 13.11.16 The Crossrail ES concludes that there will be no significant impacts during in construction or once operational. The proposals will therefore comply with the general intent of policies ST30 of the saved UDP and SP11 and TRN5 of the emerging UDP.
- 13.11.17 No significant permanent traffic and transport impacts.

Amenity (e.g.: Noise, Vibration, Air Quality)

- 13.11.18 As explained in the Tower Hamlets-wide section above, temporary significant residual construction noise impacts are contrary to planning policy. The Port East apartments will be affected by such impacts.
- 13.11.19 The Crossrail ES states that no significant residual permanent noise or vibration impacts are predicted to occur.
- 13.11.20 No significant impacts on air quality are predicted to occur as a result of construction or operational activities.

Historic Environment

- 13.11.21 There are cumulative impacts on the townscape character and on the character and appearance of the West India Docks Conservation Area as a result of the construction of the vent shaft structure.
- 13.11.22 There will also be temporary significant adverse impacts on the setting of the Grade II listed Cannon Workshops, and the Grade II listed Circular Lodge, and adverse impacts of particular importance on the setting of the Grade I listed Warehouse and West India Quay Walls.
- 13.11.23 The proposals are therefore contrary to policies DEV25 (Development in Conservation Areas), and DEV29 (Setting of Conservation Areas) DEV39 (Setting of Listed Buildings) of the saved UDP and policies UD17 (Setting of Listed Buildings), UD22 (Development in and the setting of Conservation Areas) of the emerging UDP during the construction phase.
- 13.11.24 The new shaft will be located in an open space, immediately in front of the single storey Grade II listed Cannon Workshops. The current use of the space (a car park), does not enhance the setting of the listed building. However, the introduction of a building into this open space will interrupt some views and as such it will result in a significant adverse impact on this Grade II listed structure. The proposals will also have a permanent impact on the setting of West India Quay Wall. The proposals are therefore contrary to policies DEV39 of the saved UDP and UD17 of the emerging UDP.
- 13.11.25 However, the Crossrail ES concludes that there will be no permanent impacts on townscape character or on the character, appearance and setting of West India Docks Conservation Area. As such the proposals do

not conflict with DEV25 and DEV29 of the saved UDP and policy UD22 of the emerging UDP in the long-term.

Natural Environment

- 13.11.26 The proposals will involve the removal of a number of ornamental alder trees that are protected as part of the site lies in the West India Dock Conservation Area. Policy DEV14 of the saved UDP and policy (ENV 18 emerging UDP) seeks to protect all trees that have a TPO placed on them and where they cannot be retained replacement trees should be planted. It is likely that this conflict with policy can be reduced or mitigated at a later stage when the detailed design of the operational building are agreed with London Borough of Tower Hamlets.

13.12 Isle of Dogs Station Worksite (Window C11)

Significant Characteristics of Site and Surrounding Area

- 13.12.1 The Isle of Dogs Station would be located to the north of Canary Wharf at the West India North Dock. The new station would be located on that part of the dock that extends from the east of the DLR bridge to the east end of the dock. (See figure 13.7 above for location)
- 13.12.2 The site is adjacent to the West India Dock Conservation Area. The Dock is identified as a Site of Nature Conservation Importance, a Water Protection Area and Flood Protection Area. The site also falls within a Central Area Zone.
- 13.12.3 The North Dock is the largest open water area remaining from the West India Docks completed in 1802 and closed by 1980. The first phase of the Canary Wharf development opened in 1991 with a current built floor area of approximately 6 million square feet of office and retail space with a further 8 million square feet under construction. Canary Wharf is a substantial new business district, primarily for the financial and business services sector, in its own right.
- 13.12.4 The north edge of the Dock consists of a false quay supported on piles which extends beyond the original dock edge banana walls (Grade I Listed). To the northwest is the North Quay site which is currently used as car park and for construction activities associated with Canary Wharf.
- 13.12.5 Further east, around the easternmost end of the dock is Billingsgate Market which operates as a wholesale fish market with associated ancillary buildings and parking areas.
- 13.12.6 Between North Quay and Billingsgate Market, the Great Wharf Bridge is under construction. A dual carriageway (Aspen Way) forms a barrier between the docks and the Poplar area to the north which comprises a mixture of commercial, residential and educational uses.
- 13.12.7 To the east of the dock is a parking area for Billingsgate Market containing a Grade II listed accumulator tower. To the southeast is Blackwall Basin with a navigable canal connecting to North Dock under Trafalgar Way.
- 13.12.8 The Canary Wharf complex defines the south east edge of the North Dock. There are two plots at the south-eastern end of the estate left to be completed and construction has commenced. The Bank Street phase of the Canary Wharf development is approaching completion.
- 13.12.9 The DLR bridge connecting Canary Wharf and West India Quay DLR stations crosses the dock. Beyond the bridge and along the north side are a residential and hotel complex currently under construction. The Grade I listed dock warehouses have recently been refurbished and now contain residential and leisure uses.

Overview of proposals

- 13.12.10 A new Crossrail station is proposed at West India Dock to serve the Isle of Dogs.

Permanent Works

- 13.12.11 A new station will be constructed beneath and within the West India North Dock. The station will extend from east of the DLR bridge to the east end of the dock. The station will be constructed within a 475 m long concrete box with a 245 m long island platform. This will be fitted out to 210 m with the potential for extension should the need to operate longer trains arise. A 165 m long scissor crossover at the western end of the box will enable trains to terminate at the station and return either to central London or to Abbey Wood.
- 13.12.12 Access to and from the station will be to the west of Great Wharf Bridge, which will require rebuilding. A bank of escalators will be provided from the bridge down to the dockside level where a further bank will connect with the ticket hall located within the station box beneath the water level. Further escalators will be provided to platform level.
- 13.12.13 Escape and ventilation structures will be constructed at each end of the station box.

Enabling Works

- 13.12.14 The Great Wharf Lift Bridge will be demolished to accommodate the main works for the construction of the Isle of Dogs station. Additionally, the North Quay car park and an area of parking at Billingsgate Market will be occupied for works during this advance phase.

Temporary Works

- 13.12.15 The construction including fit out and commissioning of the Isle of Dogs station will take approximately five years.
- 13.12.16 The works for the Isle of Dogs station will occupy the whole of the West India Dock North area between the DLR bridge and the eastern end of the dock. Construction activities will take place from two areas:
- the North Quay worksite: This will be situated at the west end of the construction area and will be used to construct tunnels, the western end of the station and the crossover; and
 - the Billingsgate worksite: This will be situated to the east end of the dock and will be used for station construction.
- 13.12.17 Incoming materials will be delivered by road and will enter the site from Aspen Way via Upper Bank Street or Trafalgar Way. After temporary removal of the Great Wharf Bridge Road and excavation of the cofferdam, the cofferdam itself will be used as a temporary site access road. Excavated material will be transported from the construction site via a conveyor system along Bellmouth Passage to a barge loading point in the South Dock. Excavated material will be transported away from the construction site along the River Thames by barge.

- 13.12.18 The navigation access point for Blackwall Basin and Poplar Dock through Bellmouth Passage will be closed off by the cofferdam works for the duration of construction.
- 13.12.19 On average approximately 11 lorries per day will access the Isle of Dogs North Quay access worksite during construction works. Approximately 28 lorries per day will access the worksite during the peak construction period, spanning about seven months.
- 13.12.20 On average approximately six lorries per day will access the Isle of Dogs Eastern Access worksite during construction works. Approximately 10 lorries per day will access the worksite during the peak construction period, spanning about two years and three months.

Significant extant planning permissions & proposals

- 13.12.21 In March 2003, a planning application was submitted on the North Quay site for a substantial development that, if granted, would extend the financial and business district of Canary Wharf. The application comprises 377,984 sq. metres of office with ancillary retail uses. This remains undetermined.
- 13.12.22 There are other proposals in the wider area for substantial development including Wood Wharf, which is estimated to be capable of accommodating over 250,000 sq. metres of offices and housing.

Assessment of Impacts

Transport & Traffic Management

- 13.12.23 The proposals at the Isle of Dogs will facilitate a significant improvement to public transport infrastructure providing increased capacity and greater opportunity for modal shift in accordance with policies T1 and ST27 of the saved UDP and TRN2 of the emerging UDP.
- 13.12.24 During construction, the Crossrail ES concludes that the closure and temporary removal of the Great Wharf Lift Bridge across the West India North Dock will result in diversions for pedestrians and cyclists which will cause a significant temporary impact. This will be contrary to policies ST30 and T16 of the saved UDP and SP11, IOD7 and IOD8 of the emerging UDP.
- 13.12.25 The Council wishes to see the movement of heavy goods by water and rail wherever possible to reduce unnecessary road congestion (Policy TRN12 emerging UDP, ST33 adopted UDP). It is proposed that excavated material will be transferred from the site via conveyor to South Dock for onward movement by barge to a disposal site. Therefore the proposals will comply with policy.

Amenity (e.g.: Noise, Vibration, Air Quality)

- 13.12.26 After the mitigation measures set out in Appendix B1 of the Crossrail ES there are no significant residual adverse construction noise impacts at these works sites.
- 13.12.27 The Crossrail ES states that no significant residual permanent noise or vibration impacts are predicted to occur.

- 13.12.28 No significant impacts on air quality are predicted to occur as a result of construction or operational activities.

Historic Environment

- 13.12.29 Intensive construction work within the eastern portion of the North Dock for the station construction (which will need to be drained temporarily) will result in temporary adverse impacts on townscape character. There will also be adverse impacts of particular importance on the setting of the Grade I listed Warehouse and the Grade I listed quay wall, parts of which are still visible at the west and east ends of the dock (these impacts are cumulative with works at Hertsmere Road).
- 13.12.30 The setting of the Grade II listed accumulator tower that is located east of the dock, within the Billingsgate Market worksite is also identified as being affected by the works. The excavated material conveyor on Bellmouth Passage will adversely affect the setting of the remaining section of the listed quay wall in this part of the dock. As such the construction works are contrary to saved UDP policy DEV39 (Setting of Listed Buildings) and emerging policy UD17 (Setting of Listed Buildings)
- 13.12.31 The Isle of Dogs station has been designed to minimise its footprint within the dock (and so maximised the area of open water that is retained) while still achieving other design requirements, for example allowing natural light into the sub-surface station. The island within the dock and the roof canopy have been designed as light weight structures that achieve some transparency when viewed across and along the dock.
- 13.12.32 The two new island structures will reduce the open water expanse of the dock. This will have implications for the historic outline of the dock and undermines the dock's role in defining the characteristic Dockland landscape. Overall, the Crossrail ES concludes that a significantly adverse impact on landscape character will occur. In addition, this will represent a significant impact of particular importance on the setting of this Grade I listed structure.
- 13.12.33 The proposals are contrary to policies DEV39 (Setting of Listed Buildings) of the saved UDP and policy UD17 (Setting of Listed Buildings) of the emerging UDP.
- 13.12.34 The Blue Ribbon Network policies contained in the London Plan also seek to protect the historic water environment. However, the overall compliance of the proposals with these policies is considered below.

Water Environment

- 13.12.35 The London Plan establishes the Blue Ribbon Network, a spatial policy for London's waterways, water spaces and the land adjoining them. The Blue Ribbon Network is concerned with the protection and enhancement of the waterways and water bodies for nature conservation, public realm, heritage, sport, leisure and education. The Blue Ribbon Network forms part of London's open space network. Proposals for development into the water space will only be considered appropriate where it serves a water dependent purpose or is a truly exceptional case which adds to London's World City status (Policy 4C.3).

- 13.12.36 West India Dock, Poplar Dock and the connected network of docks in this area form part of the Blue Ribbon Network. The Crossrail Isle of Dogs station is located within and under part of West India Dock.
- 13.12.37 The Crossrail ES identifies the prevention of access by boat to Blackwall Basin, Poplar Dock and moorings at the western end of North Dock during the construction of a cofferdam as causing a significant impact. There are no planning policies that specifically deal with boat access in the UDP but the London Plan contains a number of policies that seek to protect access to the Blue Ribbon Network which includes docks. The proposals are contrary to policy 4C.13 (Passenger and Tourism uses), 4C.17 (Increasing and protecting access on the Blue Ribbon Network), 4C.19 (Mooring facilities on the Blue Ribbon Network), 4C.32 (Docks).
- 13.12.38 In term of ecology, the permanent and temporary Crossrail structures in North Dock will reduce wind-driven turbulent mixing of the water and reduce the likelihood of algae blooms. In addition the isolation of Blackwall Basin and Poplar Dock will result in the disruption of fish access to Poplar Dock for breeding.
- 13.12.39 To mitigate this significant impact a water quality and aquatic ecology management plan will be developed in consultation with the Environment Agency and British Waterways. The plan will include measures to provide artificial reefs that will provide alternative fish breeding habitat. If implemented this will mitigate the significant impact on the fish populations. It is therefore assumed that the proposals do not conflict with policy 4C.3 of the London Plan and policies DEV46 of the saved UDP and ENV15 of the emerging UDP.
- 13.12.40 The proposals will have a significant adverse impact during construction on waterside access because the closure of West India Dock will block access to the Blackwall Basin and Poplar Dock and construction works will require the closure of Great Wharf Bridge. These works will result in a considerable diversion for pedestrians. The proposals are contrary to policy 4C.17 of the London Plan, policy DEV65 and of the saved UDP and policies SP18, SP19, SP20, ENV22 and IOD7 of the emerging UDP.
- 13.12.41 The proposals involve the construction of a station within West India Dock. Policy 4C.22 of the London Plan, policy DEV 49 of the saved UDP and policy UD12 of the emerging UDP state that structures in or over dock areas will only be permitted if they are essential to the movement of goods or passengers by water, or lead to an increase in their recreational use or are residential moorings. Policies 4C.29 and 4C.32 of the London Plan seek to resist the permanent loss of open water space and docks.
- 13.12.42 As Crossrail is not a water-related use and will result in the permanent loss of open water space that forms part of a dock this is contrary to policy. On balance it is considered that these works can be justified on the basis that the provision of a Crossrail station at the Isle of Dogs will sustain and enhance London's role as a World City as set out in policy 4C.3 of the London Plan.
- 13.12.43 The proposals are located within an area at risk of flooding (policies U2 and U3 saved UDP and ENV 20 emerging UDP). Policies U4 and U5 of the saved UDP (policy ENV24 emerging UDP) seek to oppose adverse development of and protect the integrity of tidal defences respectively.

- 13.12.44 The partial closure of the West India North Dock will be required during construction of the Isle of Dogs station which will reduce some of the flood storage available in this area while the Thames Barrier is left open. The Crossrail ES concludes that with mitigation measures this will not give rise to any significant impacts. In addition, whilst the permanent works within West India North Dock would lead to approximately 0.05cm higher water levels in the Thames than at present, this is not considered to generate a significant impact on water levels and will therefore comply with planning policy.

Land Use

- 13.12.45 Isle of Dogs is identified as a regeneration area in the UDP and an Opportunity Area in the London Plan (policies 2A.2 and 5C.2). Opportunity Areas have been identified on the basis that they are capable of accommodating substantial employment growth and new homes. The Isle of Dogs OA could accommodate 100,000 jobs and 3,500 new homes in the period to 2016. The improvement of public transport in the area therefore contributes positively to this policy objective.
- 13.12.46 The proposals will significantly improve access to the Central Area Zone and its facilities and therefore protect and enhance London's role as an international, national and regional centre of commerce in accordance with policy ST10, ST11, ST12 and CAZ1 of the saved UDP and SP28 and IOD8 of the emerging UDP. The proposals will also enhance the development potential of the Isle of Dogs that it is recognised by its Opportunity Area designation in the London Plan (policies 2A.2, 5C.2).
- 13.12.47 Policy IOD8 of the emerging UDP seeks to develop an integrated network of pedestrian, cycle, public transport and road routes. The proposals accord with the general intent of this policy.

13.13 Blackwall Way Shaft Worksite (Window SE1)

Significant Characteristics of Site and Surrounding Area

- 13.13.1 The site lies in an area of transition brought about by the large-scale redevelopment of the London Docklands.
- 13.13.2 The site abuts the northwest corner of the newly completed Virginia Quay residential development constructed on the former Brunswick Power Station site. The eastern boundary of this development is formed by the original power station, which has been retained.
- 13.13.3 To the south and east of the shaft location between the Virginia Quay development and the Reuters building is a flat site with open views of the Thames and Millennium Dome.
- 13.13.4 The site is located on the southern side of a recent road extension to the 'old' Blackwall Way. This extension (also named Blackwall Way) connects the newly constructed Virginia Quay residential development and East India DLR station immediately to its north through to Preston Road and the Isle of Dogs.

- 13.13.5 The site is currently used as a surface level car park. A residential development known as Blackwall Yard Development is proposed on the site.
- 13.13.6 The visually prominent Blackwall Tunnel Ventilation Building is a Listed Grade II building and lies to the west of the site.

Overview of proposals

- 13.13.7 An intervention shaft is proposed at Blackwall Way.

Permanent Works

- 13.13.8 The Blackwall Way shaft will be used as an EIP. It will consist of a 9 metre diameter shaft located immediately to the south of Blackwall Way and adjacent to the Reuters Building car park and Virginia Quay Development. On the surface, a single storey building will be integrated with a boundary wall on Blackwall Way. A small area of hard standing will also be provided for emergency services and maintenance vehicles

Temporary Works

- 13.13.9 The construction of Blackwall Way shaft including fitting out and commissioning will be undertaken over a period of approximately four years and three months.

- 13.13.10 The Blackwall Way worksite will consist of a section of land along Blackwall Way adjacent to, and including part of, the Reuter's Building car park and the Virginia Quay Development. All materials incoming and outgoing from the worksite will be transported by road. Lorries will access the worksite from Leamouth Road and A1261 Aspen Way/A1020 Lower Lea Crossing Junction from Newport Avenue.

- 13.13.11 The Blackwall Way worksite will be served by up to 10 lorries per day during the 16 week peak of construction, with an average of four lorries accessing the worksite per day at other times.

Significant extant planning permissions & proposals

- 13.13.12 A full planning application has been submitted for a major residential led mixed use development on the car park site. This development comprises 716 units, together with retail, food and drink, offices and leisure uses, primarily at ground floor. The area required for the intervention shaft is shown on the submitted plans as conservation landscape buffer integrated with a children's play space. This application is broadly supported by the Mayor.

Assessment of Impacts

Transport & Traffic Management

- 13.13.13 The Blackwall Way worksite will occupy approximately 30 workspaces used by the Reuters building. This loss identified as a temporary significant impact. Policy TRN6 states that the Council will minimise on and off-street

parking for all development within the Borough. There is no conflict with planning policy.

13.13.14 The Crossrail ES states that there will be no permanent significant impacts.

Amenity (eg: Noise, Vibration, Air Quality)

13.13.15 After the mitigation measures set out in Appendix B1 of the Crossrail ES there are no significant residual adverse construction noise impacts at these works sites.

13.13.16 The Crossrail ES states that no significant residual permanent noise or vibration impacts are predicted to occur.

13.13.17 No significant impacts on air quality are predicted to occur as a result of construction or operational activities.

Land Use

13.13.18 The site is allocated for employment development in the saved UDP. It is not allocated for development in the emerging UDP and there are proposals for major residential development on the site.

13.14 Summary of Significant Planning Policy Benefits and Conflicts within Tower Hamlets Route Section

13.14.1 The proposals give rise to the following significant planning policy benefits and conflicts during construction: -

- § **Traffic and pedestrian movement** – the proposals will be in conflict with UDP policies that seek to protect road users including buses and cyclists and pedestrians as result of the works in the Whitechapel and Isle of Dogs area.
- § **Noise** – the proposals will be in conflict with policies to minimise the impact of construction and demolition works on local amenity at Hanbury Street, Pedley Street/Mile End Conveyor worksite, Whitechapel, Stepney Green, Lowell Street and Hertsmere Road.
- § **Visual amenity** – the proposals will have an impact on the amenity of local residents at the Hanbury Street and Pedley Street worksites
- § **Setting of Listed Buildings** – the proposals will adversely harm the setting of a number of listed buildings during construction including the Stepney Green Clock Tower and Drinking Fountain on the north side of Stepney Green sports pitch (Stepney Green worksite), Cannon Workshops, Circular Lodge, Warehouse (Hertsmere Road worksite), Warehouse, Quay Wall, Accumulator Tower (Isle of Dogs worksite).
- § **Character and appearance of Conservation Areas** – the proposals will adversely harm the character and appearance of the West India Docks Conservation Area (Hertsmere Road and Isle of Dogs worksites).
- § **Recreation and open space** – the loss of leisure and recreational facilities at Stepping Stones Farm (Stepney Green) and Mile End Park will be contrary to policy.
- § **Water Environment** – the proposals will conflict with policy during construction as waterside access at the Isle of Dogs (which is within the Blue Ribbon Network) will be restricted during construction.
- § **Metropolitan Open Land** – the excavated material handling facility and worksites at Mile End Park, will affect the openness of the MOL, which is strongly protected by planning policy.

13.14.2 The proposals give rise to the following permanent significant planning policy benefits and conflicts: -

- § **Transport** – the proposals will significantly improve public transport infrastructure at Whitechapel and Isle of Dogs stations in accordance with planning policy.
- § **Townscape** - the proposals are in conflict with UDP policies which seek to ensure the bulk, height, and density of development relates to that of the surrounding area in the Hanbury Street area although it is likely that these impacts can be reduced or mitigated through replacement development.

- § **Setting of Listed Buildings** – the proposals will adversely harm the setting of a number of listed buildings.
- § **Metropolitan Open Land** –permanent loss of Metropolitan Open Land at Mile End Park and would affect the openness of the MOL and this is a conflict with planning policy. The conflict may be mitigated or reduced during the detailed design.
- § **Ecology** – the proposals will result in land take from part of the Spitalfields Viaduct Site of Borough Importance which is contrary to policy
- § **Land Uses** – the proposals will result in the loss of retail, employment and housing (Eleanor Street travellers site) uses that are protected by planning policy.