



PUDDING MILL

SUPPLEMENTARY PLANNING DOCUMENT

ADOPTED MARCH 2017



Queen Elizabeth Olympic Park

Hackney Wick

East Wick

Sweetwater

Fish Island

Stratford

Pudding Mill

Sugar House Lane

Bromley-by-Bow

CONTENTS

| | |
|---|-----------|
| 1. Introduction | 3 |
| 2. A New Identity for Pudding Mill | 4 |
| 3. Development Context | 5 |
| 4. Connectivity | 12 |
| 5. Planning Policy | 15 |
| 6. Appropriate Land Uses | 19 |
| 6.A Delivery of non-residential floorspace | 21 |
| 6.B Delivery of housing | 26 |
| 7. Townscape and Public realm | 29 |
| 8. Street Design and Guidance | 42 |
| 9. Delivery and Implementation | 47 |
| Appendix A- Employment typologies | 53 |
| Appendix B- Industrial Heritage Study | 55 |
| References | 75 |

1. INTRODUCTION

Pudding Mill is an island site in close proximity to Queen Elizabeth Olympic Park. Being partially cleared for the 2012 Games this site provides a unique opportunity to set a new identity for the area with the provision of high quality homes and employment opportunities. The site is allocated (Site Allocation 4.3) in the adopted Local Plan (2015) for new homes, business floorspace, a local centre and associated open space and infrastructure. The redevelopment of this site will provide links into Queen Elizabeth Olympic Park, to Stratford High Street and the Sugar House Lane site beyond, as well as Bromley-by-Bow to the south-east.

The policies that underwrite this strategy are set out in the Local Plan (July 2015). This Supplementary Planning Document (SPD) has been prepared to provide further guidance to those policies and help communities, businesses and developers understand how

those policies might be implemented. It also provides guidance, including design guidance, that will help planning proposals to reflect the emerging character of the area.

It should be noted that SPDs cannot make new policy. The policies are contained only within the Local Plan. These will only be reviewed when the Local Plan itself is reviewed. The SPD does, however, draw on much of the evidence and background information that was used to develop the Local Plan.



2. A NEW IDENTITY

As large parts of the site are currently vacant or in industrial use, the redevelopment of the site as a new mixed use neighbourhood provides a unique opportunity to create a new and distinctive identity of its own.

The Pudding Mill area, as defined by the Local Plan Site Allocation SA4.3, currently comprises an area of cleared land which provided temporary facilities of the 2012 Games around Pudding Mill Lane and Marshgate lane, an area of former and existing employment uses around Cook's Road in the west of the area and the Marshgate Business Park its eastern corner.

The new Pudding Mill Lane DLR station and the soon to be complete Crossrail portal and related infrastructure dominate the area along the Great Eastern Railway edge. As a former area of industrial land, Pudding Mill has long been identified as a location for redevelopment into a new mixed use community with substantial amounts of new employment use and a new local centre alongside a significant number of new homes, giving it a distinctive identity of its own. This is the vision that is reflected within the adopted Local Plan and its Pudding Mill site allocation.

PURPOSE OF THE SPD

- Help promote the comprehensive and coherent development of the Pudding Mill area
- Provide guidance on the application of Local Plan policies to proposals for new development
- Provide guidance on design of development schemes, streets and public realm to achieve a high quality and liveable environment
- To identify the physical constraints and opportunities that will influence the location of buildings, uses, streets and open space
- Creation of a coherent urban environment of streets, buildings and public realm across Pudding Mill
- Identify new or improved infrastructure considered necessary to support development within Pudding Mill

DESIGN OBJECTIVES

1. Create a new, mixed use neighbourhood with smaller character areas each with their own identity and function enabling the creation of a safe environment
2. Provide high-quality and sustainable development, building upon the industrial heritage, incorporating a green network of street trees and public open spaces, well integrated with the waterways
3. Promote a high quality streetscape, a network of fine grain streets and public spaces, with a clear hierarchy to promote pedestrian and cycle movement
4. Improve connections between the site, Queen Elizabeth Olympic Park and the surrounding area

3. DEVELOPMENT CONTEXT

The fundamental aim of the SPD is to help facilitate comprehensive and complementary mixed use development across the whole of the site.

As shown within Map 1 overleaf, the site is owned by a range of different landowners each with their own aspirations and potential delivery timescales. This SPD will provide guidance in relation to how these different sites can be brought forward for development in a comprehensive manner to achieve the delivery expectations for the site as a whole.

Map 2 demonstrates how different parts of the site have differing planning statuses (i.e. some with full planning permission and some with outline schemes). This brings additional delivery challenges in relation to the timing of schemes, delivery of essential infrastructure, impacts in relation to incompatible uses and the interactions between the Other Industrial Location (OIL), Crossrail and the wider area as new development emerges.

Existing consents

Map 2 overleaf shows the schemes with current consent¹. These are:

- Part of Planning Delivery Zone 8 (PDZ 8) of the Legacy Communities Scheme (11/90621/OUTODA)
- Marshgate Lane (14/00422/FUL)
- Cook's Road (15/00392/FUL)

In total, this amounts to approximately 1,459 residential units, 42,142 sqm employment, 2,345 sqm retail, 1,651 sqm leisure and community uses and 200 sqm of flexible uses.

This relates to replacement of approximately 56% of existing employment floorspace. Therefore future proposals within the site should continue to provide employment floorspace to meet the cumulative policy requirement of 25% non-residential floorspace and re-provision of employment floorspace subject to considerations identified within Policy B.1, Site Allocation SA4.3 and guidance within this SPD.

Potential scheme changes

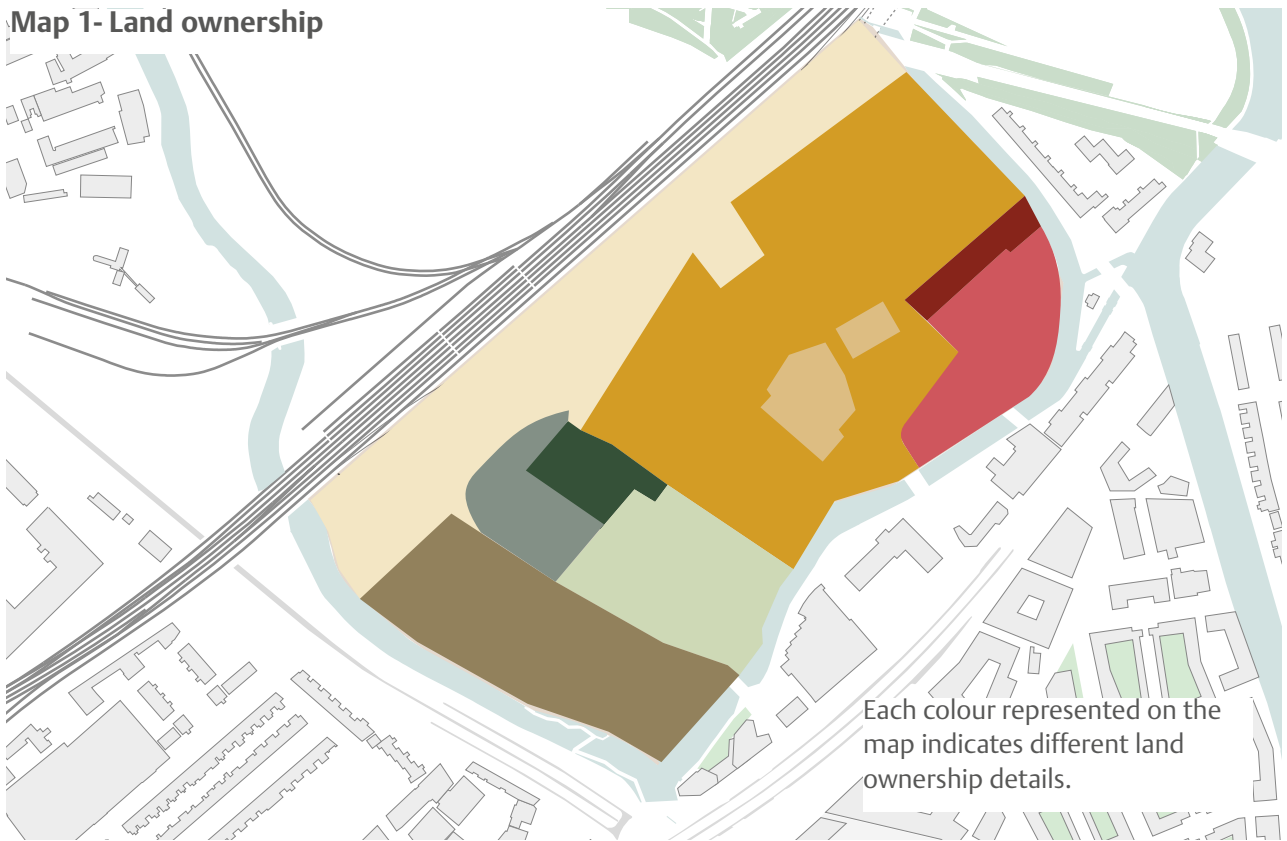
The Legacy Corporation is currently developing proposals for a Culture and Education District at Stratford Waterfront (Legacy Communities Scheme PDZs 1 and 2). The Legacy Communities Scheme (LCS) is also currently being reviewed at PDZ8 which includes a significant part of the Pudding Mill area (see Map 2 for boundary).

This means that the planned quantum of housing and the proportion of affordable housing within this part of Pudding Mill is likely to be amended to help ensure housing delivery as part of the Legacy Communities Scheme as a whole continues to be optimised.

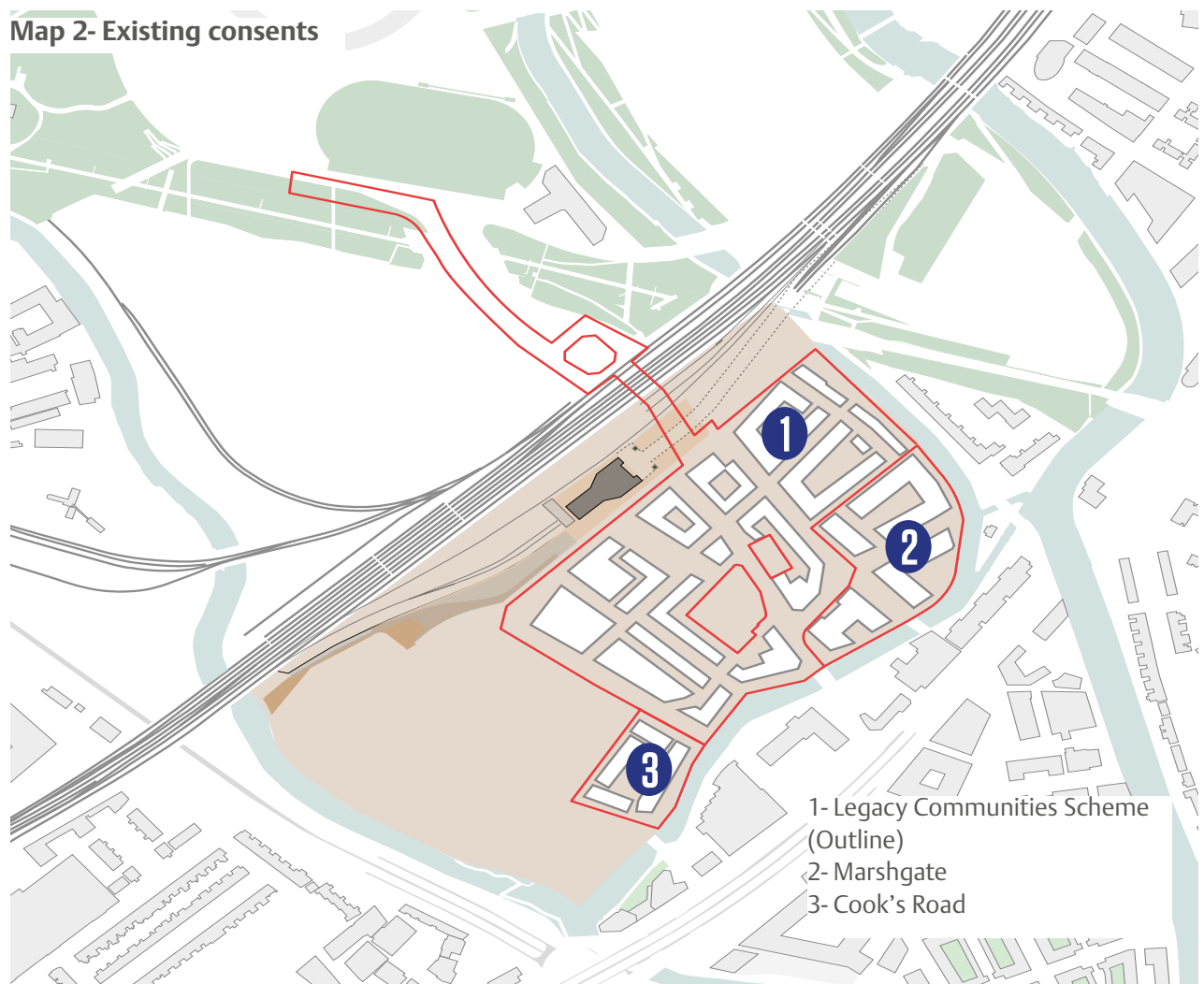
It is currently anticipated that planning applications for the Culture and Education District proposals will be submitted by the Legacy Corporation to the local planning authority in mid-late 2017 and for its land at Pudding Mill soon after this.

1 Marshgate subject to Section 106 agreement

Map 1- Land ownership



Map 2- Existing consents



SITE LOCATION

The Pudding Mill site is located within Stratford, east London. It is an island site bounded on three sides by the waterways and to the north by the railway line. It is located in close proximity to Queen Elizabeth Olympic Park and is set back from Stratford High Street. Map 3 below shows its location in relationship to the key features of the surrounding area.

1 Pudding Mill Lane DLR Station

2 Stratford Waterfront west has permission under the LCS scheme for approximately 900 homes and the location of part of the forthcoming proposals for the Culture and Education District

3 Bridgewater Road has permission under the Legacy Communities Scheme for approximately 300 homes alongside allotments. This site is also subject to potential change as amendments to the LCS emerge.

4 Sugar House Lane- Permission for mixed use development including up to 1200 homes, extensive offices and workshop, supporting retail and hotel

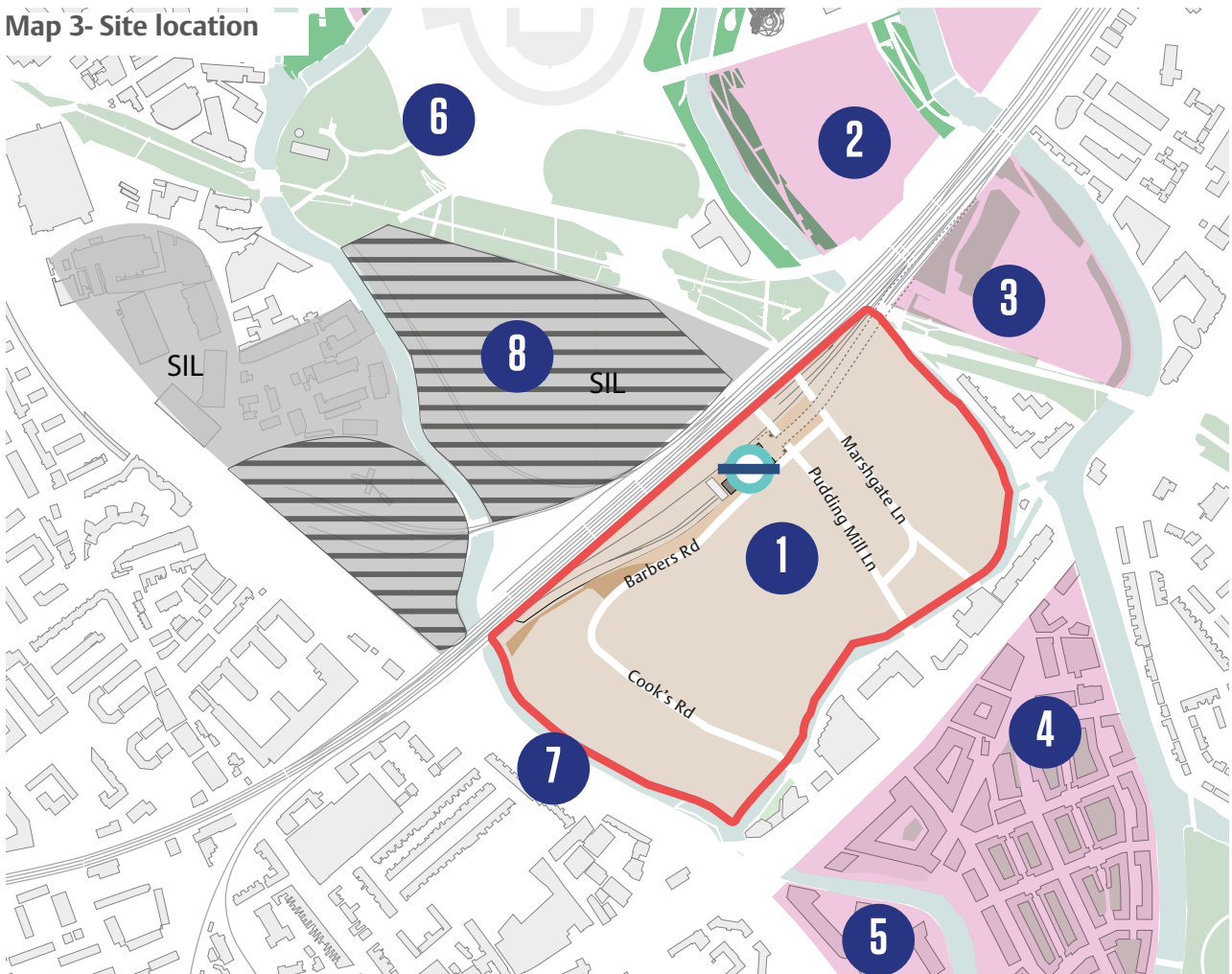
5 Bromley-by-Bow- Mixed use area incorporating District Centre retail, primary school and over 1,000 homes. A Supplementary Planning Document is also being produced for this site.

6 Queen Elizabeth Olympic Park- high quality open space, leisure and play facilities

7 A12- Barrier between site and residential to the west

8 Strategic Industrial Location (SIL). This area comprises of Bow Midland West operating as an active rail head, and Bow Goods Yard East which is operating as an active rail head for the transfer of spoil and waste.

Map 3- Site location



SITE HISTORY

Marshland and Roman road, known as 'Stratforde'

1110 a new stone bridge built across the river at Bow

1700's small scale paper and porcelain industries emerge

Mid 1800s industrial expansion as noxious industries such as tanning, oil industries and soap production were permitted beyond metropolitan boundaries

1860s commencement of reclamation of central part of Pudding Mill from marshland with rebuilding of bank at Pudding Mill

Late C19th the site is now fully occupied and exclusively devoted to noxious industries including glue works, pig dealership and chemical industries

Turn of the C20th saw the introduction of railway, defining the boundary of the site to the north

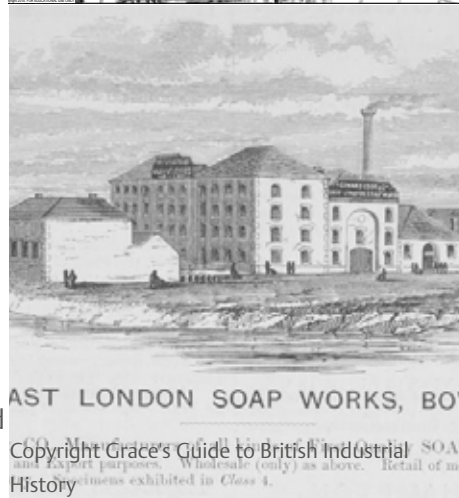
1930s new Bow Power Station power-station in central part of site,

1968 Decommissioning of the power station

Late C20th industrial continuation within lighter industries

Early C21st some remaining industrial uses and site clearance for 2012 Games

New Pudding Mill Lane DLR station 2014 further into the site

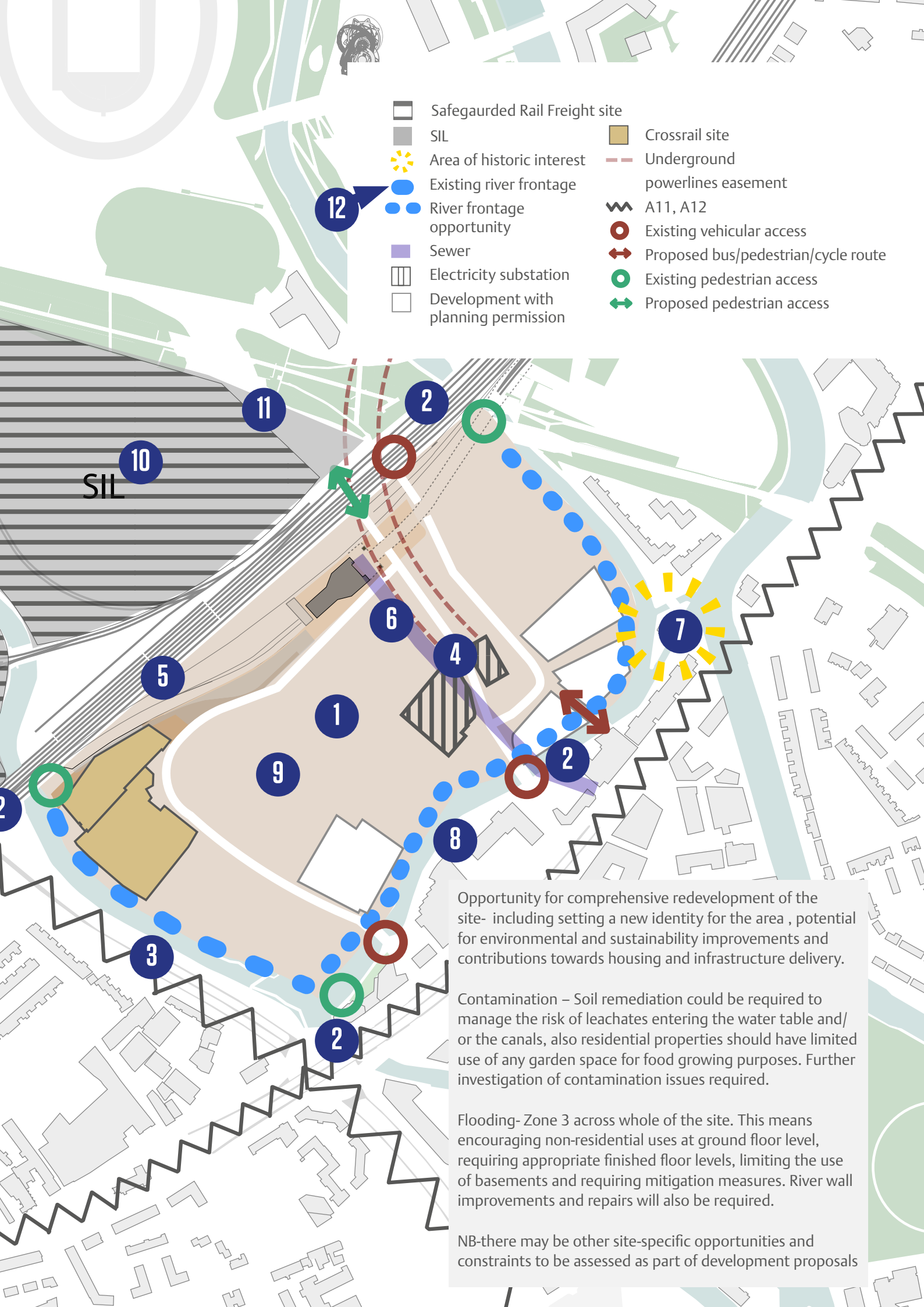


OPPORTUNITIES AND CONSTRAINTS

- 1** Connectivity- Pudding Mill is an 'Island site' enclosed entirely by rail and waterways, limiting the access into the site and its relationship with the wider area. This also provides an opportunity for improvements to the pedestrian and cycle networks through the site and to the wider area.
- 2** Access points and routes- Current access into the site is limited to Pudding Mill Lane, Cook's Road, into Queen Elizabeth Olympic Park under railway line via Marshgate Lane. This limits the ability of industry to move goods and increases the likelihood of industrial traffic movements impacting on residents in the short to medium term. Pedestrian access is also provided at the south-western corner and along the towpath on the western edge, with opportunities for access from the Greenway.
- 3** Noise and air quality- the A12 is a source of noise and Stratford High Street and the A12 are within an Air Quality Management Area (AQMA). The combination of high noise and low air quality can impact on any sensitive industries that are considering moving into the area as well as the population of new residential developments.
- 4** Electricity Substation /Underground powerlines and access shafts – Both the substation and the access shaft must remain accessible at all times and the powerlines have an easement around and above them. This presents a challenge to incorporate this into the Local Centre.
- 5** Rail Infrastructure - DLR and Crossrail impact on land availability and uses in the vicinity of the infrastructure as well as create an opportunity to activate the covered spaces.
- 6** Major Flood Relief Sewer – a major sewer transects the site and affects where buildings can place footings.
- 7** Relationship to heritage assets – much of the industrial character has been lost, with the industrial waterways and historic structures such as the Lock-keeper's Cottage on the Bow Back and City Mill Rivers provide design cues for the development and public realm coming forward.
- 8** River Frontages - Three navigable rivers circle the site. One is of a southerly aspect with increased level of daylight and sunlight which presents a good opportunity for sitting out purposes. The frontages also present opportunities for enhancing off-road routes.
- 9** A waste site on the western part of the site creates environmental impacts in relation to noise and odour. This provides a constraint on development in its current form but also provides an opportunity to relocate incompatible uses to more suitable locations.
- 10** Relationship to Strategic Industrial Location including safeguarded rail freight site allowing for associated bulk freight and heavy industrial uses and processes. There is also potential noise and disruption including vehicular movements through the site to access.
- 11** Opportunities for improvements to eastern edge of the SIL as an entrance to Queen Elizabeth Olympic Park and the Cultural and Education District beyond
- 12** The location in close proximity to the Cultural and Education District at Stratford Waterfront provides opportunities for business linkages and supporting development

Map 4- Opportunities and constraints





- Safeguarded Rail Freight site
- SIL
- ★ Area of historic interest
- Existing river frontage
- ◐ River frontage opportunity
- Sewer
- Electricity substation
- Development with planning permission
- Crossrail site
- - - Underground powerlines easement
- ⋈ A11, A12
- Existing vehicular access
- ↔ Proposed bus/pedestrian/cycle route
- Existing pedestrian access
- ↔ Proposed pedestrian access

Opportunity for comprehensive redevelopment of the site- including setting a new identity for the area , potential for environmental and sustainability improvements and contributions towards housing and infrastructure delivery.

Contamination – Soil remediation could be required to manage the risk of leachates entering the water table and/ or the canals, also residential properties should have limited use of any garden space for food growing purposes. Further investigation of contamination issues required.

Flooding- Zone 3 across whole of the site. This means encouraging non-residential uses at ground floor level, requiring appropriate finished floor levels, limiting the use of basements and requiring mitigation measures. River wall improvements and repairs will also be required.

NB-there may be other site-specific opportunities and constraints to be assessed as part of development proposals

Map 5- Area of influence



AREA OF INFLUENCE OF THE SPD

The SPD covers the site allocation but the area of influence extends beyond these boundaries (as shown on Map 5). There are inter-relationships between this site and other sites in close proximity:

- Legacy Communities Scheme (LCS) at Bridgewater Road (SA3.5) and the proposed Cultural and Education Quarter at Stratford Waterfront (SA3.2; SA3.3)
- Industrial uses to the north and west within the Strategic Industrial Location (SIL) and Locally Significant Industrial Site (LSIS) designation to the north of the Sugar House Lane Site Allocation (SA4.2).

Guidance within this SPD will also impact upon:

- Design of the waterway, including the towpaths accessibility and safety and paving design
- Air quality through expecting industry to meet tougher environmental standards as residential development is introduced to the area.
- Daylight and sunlight through high quality design

of the taller buildings.

- Industrial heritage by providing design templates that recognise the importance of this heritage and how it can provide the area with a distinct identity. Together with the design templates a material palette will allow for a more harmonious development pattern overall, providing methods to better integrate uses across the area.
- Building heights along Stratford High Street currently dominate the canal-side of the site, therefore the prevention of canyon effects will be key, particularly along the canal. This principle will also influence the form of development to the south of the canal outside site
- Pedestrian and cycle connections through the site across the Greenway and the Greater Carpenters area, new and improved pedestrian, cycle links from Pudding Mill Lane DLR Station to Queen Elizabeth Olympic Park via the Greenway
- Bow Vision proposals improving connectivity and the pedestrian and roadside environment within the area..

4. CONNECTIVITY

The relative isolation of the site and resulting connectivity issues are key defining features of the site. This needs to be addressed from the outset through ensuring that the site is accessible by different transport modes and maximising permeability through provision of new routes to, from and through the site.

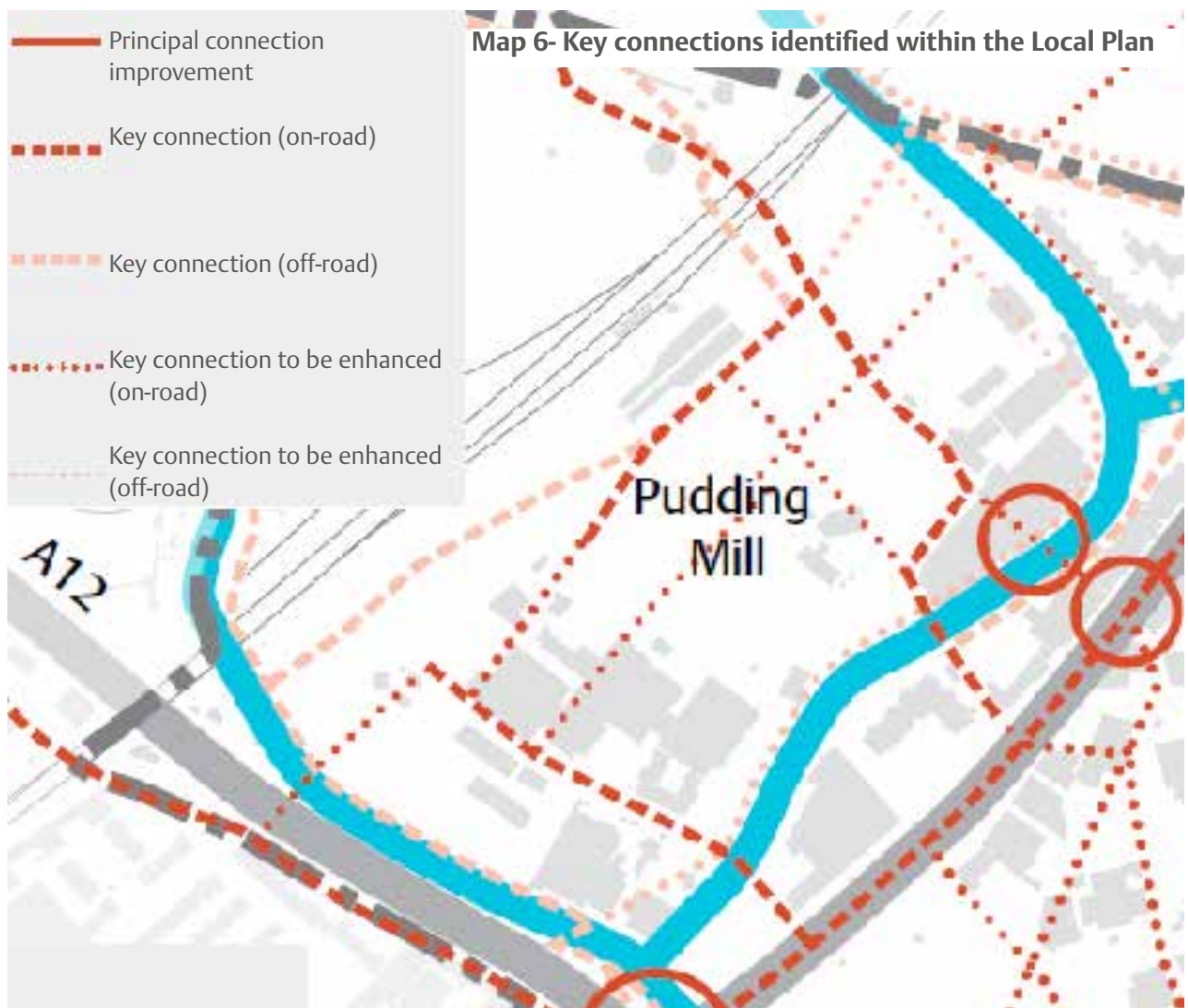
One of the first considerations for any proposal within the site should therefore be how the development can contribute to and enhance connectivity, while considering the transport impacts of the development on existing and proposed infrastructure.

Public Transport

The site is currently served well by public transport

with the Pudding Mill Lane DLR station situated within the site itself. This provides an easy link to Stratford Station and the wider DLR network, which provides a vital link for the area. As the residential and working population increases its use will be intensified. Replacement and expansion of the DLR train fleet will allow longer & higher-capacity trains to operate on this line. Double tracking remains a long-term aspiration to enable more frequent trains.

Bus routes currently run along Stratford High Street, in close proximity to the site. The enhanced connectivity would allow a bus route to run from Queen Elizabeth Olympic Park along Marshgate Lane and onto Stratford High Street. Other bus routes through the area would be dependent on demand and funding and should be considered alongside the development of the area.





Together public transport links will provide key means of transport for residents, employees and visitors.

Key routes and connections

An extract of Figure 37 of the Local Plan is shown for the site in Map 6, highlighting the key routes and connections to be brought forward across the area. It shows that the existing key on-road connections are along Cook's Road, Barbers Road and Marshgate Lane. As parts of the site currently have limited accessibility, key on-road connection enhancements include the re-provision of the connection through the site along Barbers Road improvements to Pudding Mill Lane and the provision of other new and enhanced routes across the site.

The map also shows a number of existing off-road connections within and in close proximity to the site which can be enhanced and linked through new development. This includes links with Sugar House Lane and Bromley-by-Bow.

Pedestrian and cycling provision

The main pedestrian routes through the site will follow the waterway via the east-west street and Barbers Road and the north-south connection along Marshgate Lane and Pudding Mill Lane. In addition to their connectivity function, the new and enhanced routes along the waterways will create vital green space, opening out into areas of peace and reflection.



Other pedestrian and cycle links in close proximity include the Greenway, the Lea Valley Walk and the continuous towpath along the Lee Navigation, Bow Back and City Mill Rivers. Where possible, connections with these routes should be facilitated.

Routes should provide for ease of movement with consideration of where the main pedestrian routes also function as cycle routes including the separation of users or where not possible, measures to reduce speed on shared roads and surfaces. Cycle routes should be on the quieter routes such as along the east-west street and northerly along Pudding Mill Lane.

Cycle provision should consider the potential impacts of access to the Other Industrial Location as well as the short to medium term impacts of access to the Strategic Industrial Location to the north. When considering the form and layout of cycle routes, consideration should be given to the six design outcomes of the Cycling Level of Service Standards (CLoS) (safety, directness, coherence, comfort, attractiveness and adaptability).

Cycle parking should be provided according to standards, positioned in suitable locations according to the use and function of the location, to minimise clutter and provide safe and free ease of movement. Consideration of bespoke designs to create identity.

Connection strategy

Taking these considerations into account, Map 7 shows the detailed strategy for connections within

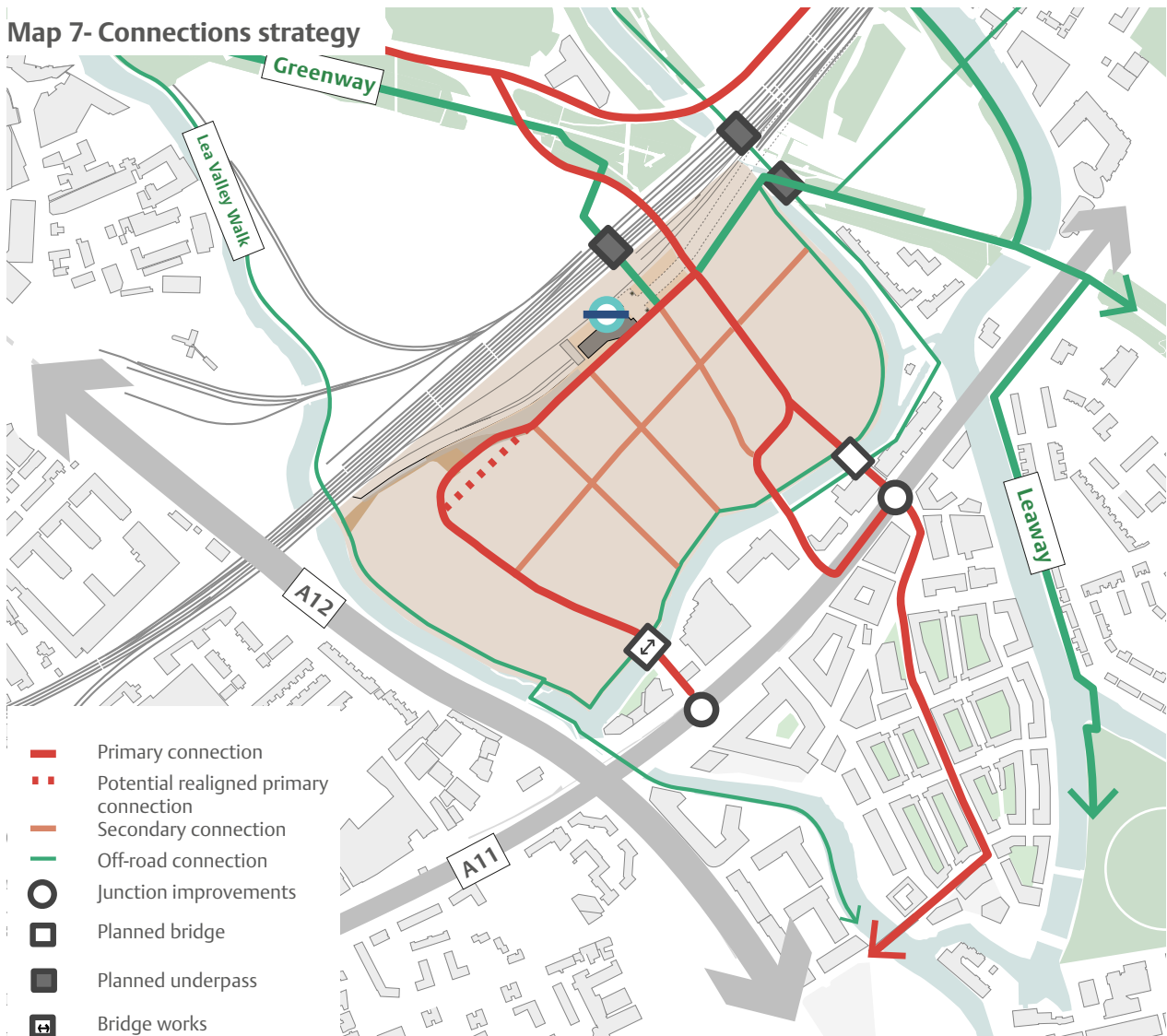
and surrounding the site, which will enable enhanced permeability as well as influencing the form of development proposed.

It shows a number of road enhancements, new secondary roads through the site as well as off-road connections along the waterways. This strategy should be considered when developing proposals within the site. This includes specific enhancements which will assist connectivity to, within and from the site:

- Widening of Cook's Road bridge
- A new bridge across Marshgate Lane
- East-west connections across the site
- New pedestrian underpasses linking the Queen Elizabeth Olympic Park and between Bridgewater Road
- Junction improvements on Stratford High Street.

Further information in relation to these projects is provided within Chapter 9: Delivery and Implementation.

Map 7 also shows the potential benefits of re-aligning Barbers Road away from the edge of the Crossrail site. This may be a consideration for proposals coming forward within the northern part of Cook's Road/Barbers Road which could enable screening of the Crossrail site. Further information is provided within Chapter 7.



5. PLANNING POLICY CONTEXT

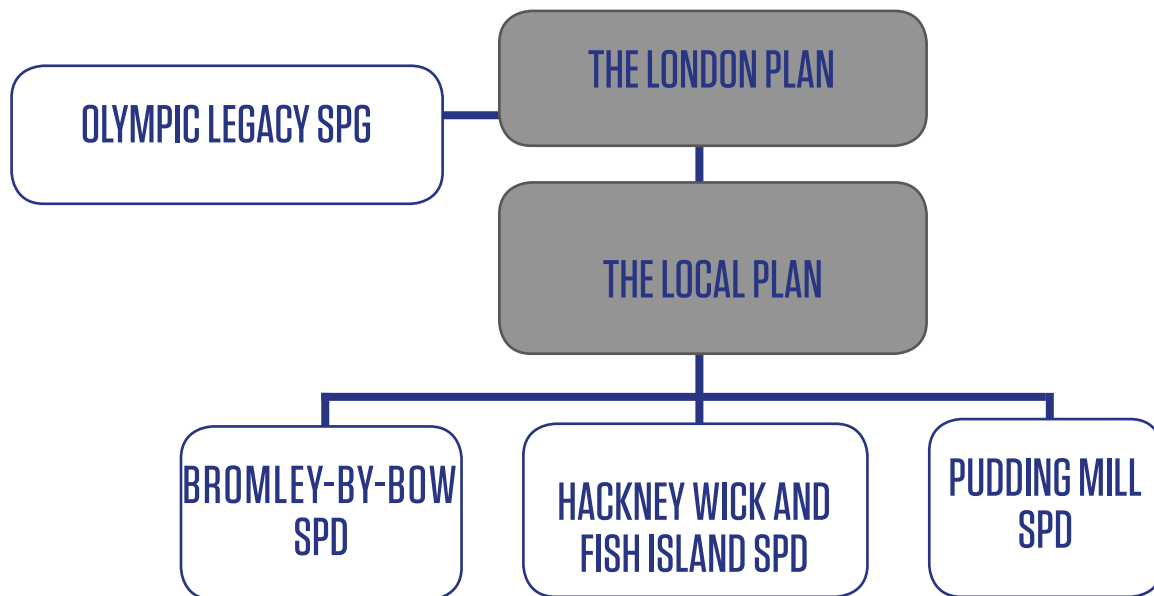


Figure 1- Planning policy chain of conformity

Figure 1 demonstrates how the Pudding Mill SPD relates to the Local Plan and the chain of conformity with higher level plans. The SPD must be in accordance with the Local Plan and the London Plan and it cannot set new policy. SPDs also need to be developed in accordance with the relevant regulations and guidance contained within the National Planning Policy Framework, National Planning Policy Guidance and the Town and Country Planning (Local Planning) (England) Regulations 2012. It will set out guidance on how policies within the Local Plan should be interpreted within the area.

Notwithstanding the Local Plan policies which relate to all development proposals (for example, H.2 Delivering affordable housing, BN.1 Responding to place, BN.4 Designing residential schemes, BN.5 Requiring inclusive design and T.4 Managing transport impacts). This section provides a summary of the Local Plan policies which have particular implications for development proposals within the area. The policy wording should be read in full and all policies within the Local Plan should be taken into account when developing proposals within the Pudding Mill area.

The full Local Plan is available at: <http://>

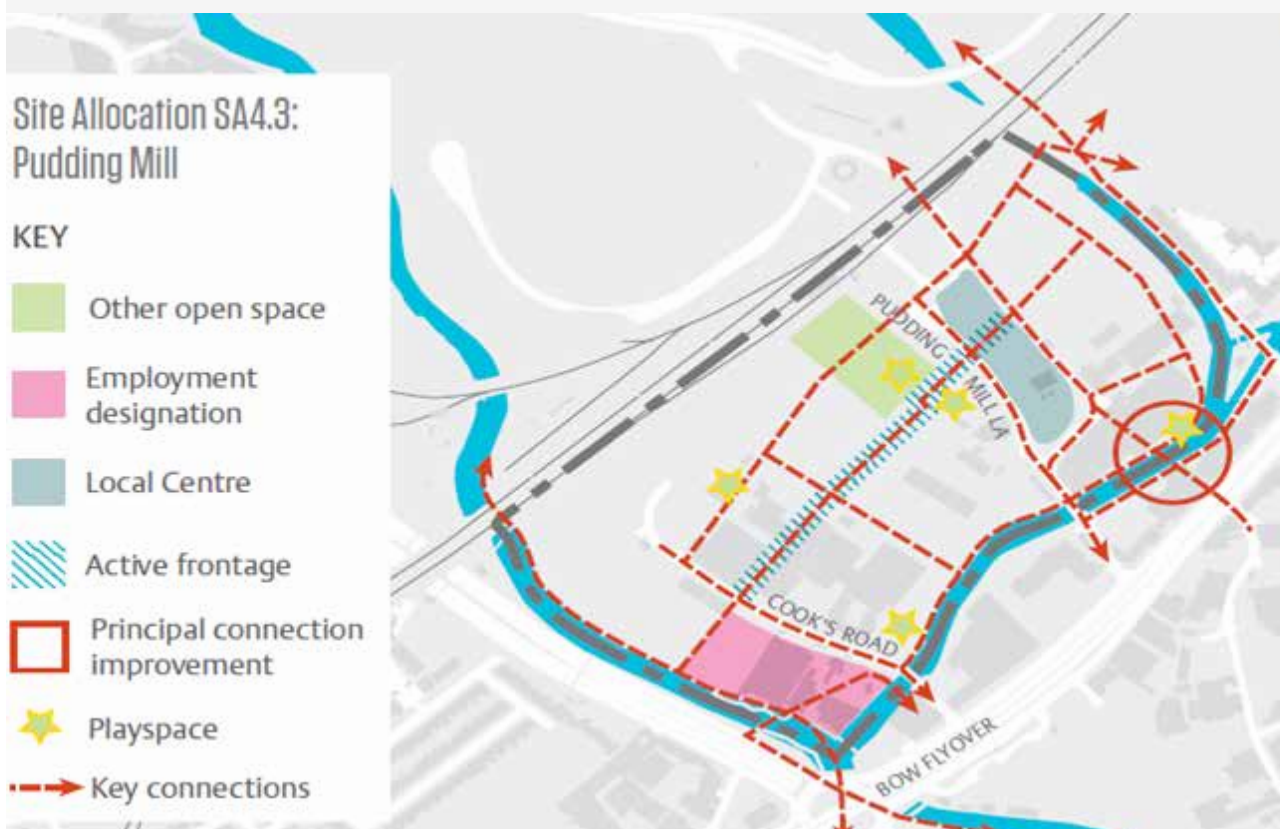
queenelizabetholympicpark.co.uk/our-story/transforming-east-london/local-plan

The full Local Plan text of Site Allocation 4.3 for the Pudding Mill site is represented overleaf. Other key policies are B.1 and BN.10. The policy information provided on page 17 is not exhaustive and the full text of the policies and the Local Plan should be read in full.

SITE ALLOCATION 4.3 PUDDING MILL

A new medium-density, mixed-use area, including a significant and diverse element of new and replacement business floorspace, including spaces suitable for small- and medium-sized businesses; a new Local Centre adjacent to Pudding Mill Lane DLR Station and Pudding Mill Lane; new homes including a significant element of family housing; new Local Open Space, playspace and public realm. Cumulatively across the Pudding Mill Site Allocation, 25 per cent non-residential floorspace should be achieved, with a predominantly industrial floorspace use mix in the area to the west of Cooks Road and around the Crossrail portal.

- Proposals for development above 21 metres above ground level will only be acceptable subject to the provisions of Policy BN.10
- Non-residential uses should be focused along a new central east-west street
- The form of development should allow for improved east-west connections through the site
- Provision should be made for key connections, including new bus/cycle/pedestrian connection from Stratford High Street to Marshgate Lane and a new pedestrian/cycle connection from Wrexham Road over the A12 and River Lea
- Land should be safeguarded for DLR North Route Double Tracking phase 2
- Regard will need to be had to not prejudicing the operation of the safeguarded rail freight site to the west (for example by ensuring that noise sensitive uses are located away from the site)



OTHER RELEVANT LOCAL PLAN POLICIES

B.1 Location and maintenance of employment uses

- New office floorspace provided within the area should be focussed within the Local Centre
- The Other Industrial Location (OIL) at Cook's Road currently in B1c/B2 and B8 uses provides a redevelopment opportunity for the provision of B1-B8 floorspace with the potential for an element of residential. (See References section for full Local Plan description).
- Re-provision of employment floorspace

B.2 Thriving town, neighbourhood and local centres

- New retail and leisure floorspace provided should be focussed within the Local Centre
- Away from the centre A and D uses and any B1(a) should be small scale (less than 200sqm) and ancillary to other uses.
- Complementary residential may be suitable

B.4 Providing low cost and managed floorspace

There is some existing low cost and managed workspace within the site, this policy encourages the retention/re-provision of this type of workspace.

B.6 Higher education, research and development

Pudding Mill is a location where these uses should generally be seen as suitable, having the potential to support and serve the Culture and Education District.

H.1 Providing a mix of housing types

Pudding Mill Site Allocation places emphasis on family housing (3-bed +) at Pudding Mill.

SP.3 Integrating the natural, built, and historic environment & BN.1 Responding to place

Acknowledging the historic industrial heritage in design templates and materials provides an opportunity to maintain the identity and provide linkages to the remainder of Sub Area 4 and beyond.

SP.5 A sustainable and healthy place to live and work

As an area of new development a high level of sustainability can be achieved.

S.8 Flood risk and sustainable drainage measures

Flood zone 3 means proposals should include Flood Risk Assessment. Development should be designed appropriately to reduce vulnerability, have no basements, incorporate buffer strips adjacent to waterways and consider sustainable drainage systems before other options. Development should ensure river walls are repaired where there is a need

and development faces the waterways.

Policy 4.2 Bringing forward new connections to serve development

Specific new and enhanced connections across the vicinity (see Map 6) include:

- West to east pedestrian and cycle route, parallel with Stratford High Street, through Pudding Mill, across the Greenway and Greater Carpenters
- New and improved pedestrian and cycle links from Pudding Mill Lane DLR Station to Queen Elizabeth Olympic Park

BN.2 Creating distinctive waterway environments

Being surrounded on three sides by waterways, proposals on the site should improve access and movement, improve ecology and introduce recreational and commercial activities.

BN.10 Proposals for tall buildings

Proposals for tall buildings may be acceptable if they meet the requirements set out in this policy.

BN.11 Reducing noise and improving air quality

Being adjacent to the Stratford High Street and A12 AQMA proposals within the site should provide an air quality and noise assessment.

BN.13 Improving the quality of land

Presence of contamination means that site investigations and Contaminated Land Assessments are likely to be required.

IN.2 Planning for waste

Any proposal incorporating the loss of the existing waste facility should ensure that an additional waste management facility is secured off-site or an existing site is capable of providing the capacity, and the site is capable of serving same needs and is within the same waste management authority or group.

T.2 Transport Improvements

Future bus services for Pudding Mill Lane and Marshgate Lane may be required as the population in the area increases.

T.3 Supporting transport schemes

The DLR double-tracking project affects the area to the north of the site along the existing railway line.

T.4 Managing development and its impacts to promote sustainable transport choices facilitate local connectivity and prioritise pedestrians and cyclists

Section 106 and section 278 agreements will be sought with developers.



T.10 Using the waterways for transport

Proposals may be required to improve access to waterways, improve towpaths and introduce moorings for passengers and freight.

APPLYING LOCAL PLAN POLICIES TO EXISTING ON-SITE USES

Table 1 below shows the current uses across the site, and how policy requirements relating to protection or re-provision of these uses will apply. Re-provision of employment will amount to at least 75,000sqm of employment floorspace and up to 10,000sqm of retail and leisure will form the Local Centre with some limited further potential outside the centre boundaries. Re-provision of employment should be considered in the context of the SA4.3 requirement that 25% of cumulative floorspace should be non-residential. This means that across the site as a whole, the quantum of non-residential uses will relate proportionally to density.

This SPD provides guidance in relation to where these non-residential uses should be focussed and appropriate uses per location.

Table 1- Existing employment and infrastructure floorspace

| Floorspace | Sqm (approximate) | Policy |
|---------------------------|--|---|
| Industrial (incl vacants) | 69,420 (of which: 6,730 in OIL; 46,000 vacant) | B.1 seeks re-provision of equivalent B2/B8 floorspace Maintaining balance of use and floorspace in OIL |
| Office | 5,373 | B.1 seeks re-provision of equivalent B1a floorspace, or significantly increased job density |
| Transport functions | 38,709 | |
| Waste and utilities | 7,415 | IN.2 sets out circumstances where loss may be appropriate. |

Source- Data gathered through the Pudding Mill Land Use and Design Framework, 2014

NB- Figures are indicative as at 2014

POLICY OBJECTIVES

The relevant Local Plan policies have been brought together to determine the policy objectives to be achieved across the site.

Proposals within the site should contribute towards meeting these aims, and the ability to meet these objectives across the whole of the site should not be compromised by proposals within it.

General across the site

To deliver a new, mixed use neighbourhood incorporating employment, retail and community uses alongside open space and playspace.

Specific

1. To focus main town centre uses within a new Local Centre adjacent to the DLR station
2. To provide for a diverse range of employment floorspace, focussed around the Local Centre, Barbers Road and heavier industrial uses to the south-west corner within the Other Industrial Location
3. To contribute to area-wide housing targets, delivering a mix of housing tenures and types, with a focus upon family housing
4. Securing and providing new roads and walking and cycling connections through the site and links to the surrounding area via new bridges
5. To provide infrastructure to support development including provision of new and enhanced bridges and underpasses, open space and playspace

Map 8- Land use map

6. APPROPRIATE LAND USES

BARBERS ROAD WEST

- Range of B class uses
- Transition from B1a to B1b, B1c workshop uses as move westwards away from Centre
- Potential for new residential, where appropriate

NB- Includes potential for re-alignment of the road and new block format created

CROSSRAIL

- Range of uses for functionality and management of Crossrail to be maintained.

COOK'S ROAD (ADJACENT TO THE OIL)

- Mix of residential and employment uses (B1b or B1c workshops)

OTHER INDUSTRIAL LOCATION (OIL)

- >6700sqm employment floorspace in B1c/B2 workshops, B1b research facilities, B2 or B8 uses
- Potential for elements of residential, where appropriate

Map 8 shows the different character areas within the site, derived from the policy requirements of the Local Plan (Policy B.1, Policy B.2 and SA4.3 in particular). It represents an option of how the combination of policy requirements can be met within the site.

The following parts of this chapter provide further detail in relation to the uses and form of development appropriate within each location in relation to non-residential and residential development.

NB- Identification of potential uses adjacent to the railway line subject to safeguarded appropriate land for the DLR North Route double-tracking Phase 2.



LOCAL CENTRE

- Delivery of $\leq 10,000$ sqm retail, leisure and service floorspace
- Range of A1-A5, D uses and B1a offices
- Retail floorspace to be provided within a range of sizes but all units less than 2,500sqm in size
- B1a most appropriate in this location so office focus to employment
- B1b use may be appropriate in this location dependant on the type of research and development to be undertaken
- B1c may also be appropriate
- Potential for residential, where appropriate

ELECTRICITY SUB STATION

- Maintained sub station with potential for enhanced boundary treatments

RESIDENTIAL FOCUSED LOCATIONS

- Residential led development with potential for some other non-residential elements
- Ancillary A and or D uses where appropriate
- Some ancillary B1a uses, B1b or B1c workshops

EAST-WEST STREET

- Mixed residential / non-residential uses
- Range of B1 uses along western end of road
- Possibility for A and D uses as approach centre on the eastern end of the road

6.A: DELIVERY OF NON-RESIDENTIAL FLOORSPACE

Relevant Policy Objectives

1. To focus main town centre uses within a new Local Centre adjacent to the DLR station.
2. To provide for a diverse range of employment floorspace, focussed around the Local Centre, Barbers Road and heavier industrial uses to the south-west corner within the Other Industrial Location designation.

Proposals across the whole of the site should contribute to the quantum of non-residential floorspace according to policies requiring re-provision of existing employment floorspace, overall site allocation requirements, and the location within the site. This section will provide some further detail in relation to suitable forms of non-residential uses across the site.

Site Allocation 4.3 requires that cumulatively 25% of all floorspace across the site should be in non-residential use. Other Local Plan policies direct particular non-residential uses to specific locations across the site. The cumulative 25% non-residential requirement is not therefore considered a requirement across each constituent part of the site; instead there are character areas where these non-residential uses should be focussed, and conversely areas where the proportion of non-residential uses are likely to be lower. Some areas will provide a broad non-residential focus while others are more employment focussed. These areas are shown within the land use map on Map 8 are:

- Local Centre
- East-West street
- Other Industrial Location (OIL)
- Cook's Road
- Barbers Road

NON-RESIDENTIAL FOCUSED LOCATIONS

These locations should provide a range of non-residential uses.

Local Centre

A key aim of the Local Plan is the establishment of a

coherent and active new local centre at Pudding Mill adjacent to the DLR station, extending southwards along Marshgate Lane and Pudding Mill Lane. The Local Centre boundary has not yet been defined, but will be included within future Local Plans once the town centre uses emerge.

This new Local Centre will serve the development taking place within the site but also the wider local area, and non-residential uses within this location will largely be main town centre uses as defined within Annex 2 of the National Planning Policy Framework (NPPF).

The town centres first principle within the NPPF guides what form of uses are appropriate within town centres. The new Local Centre will also be the most appropriate location for other community uses. Therefore uses welcome in the Pudding Mill Local Centre include:

- A1 convenience retail (e.g. a small supermarket and newsagents), small-scale comparison retail (e.g. clothes shops)
- A2 services such as banks, hairdressers and dry cleaners
- A3 and A4 uses including cafés, restaurants and public houses
- D1 and D2 community and leisure facilities (e.g. doctors, dentists and exercise studios)
- B1a office accommodation

In relation to quantum, the London Plan sets out that local centres typically have less than 10,000sqm of retail, leisure and service floorspace, which will be considered the upper limit for these uses within the Pudding Mill Local Centre to ensure it functions as a local service centre.

Other B1 class employment uses such as workshops and research and development may be appropriate within the Local Centre, to take advantage of links and proximity to the Culture and Education District proposals at Stratford Waterfront. These uses should however ensure the focus on town centre uses within the Local Centre itself prevails.

Transport accessibility and the nature of the uses proposed means there is potential for higher density development within the centre, including some taller building elements subject to Policy BN.10.

Retail, leisure and service uses should primarily be located on the ground floor to create active



frontages with some additional potential for blocks exclusively dedicated to town centre uses, subject to suitable positioning in relation to the centre and the location of other town centre uses proposed.

Introduction of flexible unit forms with suitable servicing arrangements to enable take-up by a variety of town centre uses. Creating interest and a sense of place by the gradual introduction of non-town centre uses as move away from Local Centre.

Active frontages should be maximised along key connections and routes through the site and wherever development faces publicly accessible space with visually permeable elevation and generous distribution of entrances. This form of development should enable principal access by foot or by cycle, suitable to the local centre designation. Upper floors of buildings within the centre should be in employment and/or residential use, with entrances well positioned amid active frontages.

East-West Street

The east-west street is a focus for non-residential use, which should also include some employment. Along the east-west street it is more appropriate to accommodate non-residential uses on the lower floors.

As identified above, the Local Centre boundary is as yet, undefined. Therefore there is also potential for the introduction of town centre, or community uses towards the eastern end of the east-west street. The close proximity to the range of town centre facilities



in this location also means that the eastern part of this street may also be suitable for other community uses.

Non-residential uses at the western end of the street will need to carefully consider the transition from heavier employment uses in the OIL to residential uses further into the site. Therefore non-residential floorspace in this location is likely to be within B1b or B1c use classes.

EMPLOYMENT USES

Current position

As set out within Table 1 there is approximately 75,000 sqm of existing employment floorspace across the site. At present there are three consented schemes which cumulatively provide around 42,000sqm employment, which is approximately 56% of the baseline employment requirement.

This means that as the situation stands, other schemes will need to cumulatively provide approximately 33,000sqm of employment floorspace to meet the policy requirement. At least 7,000sqm of this floorspace should be re-provided within the OIL designation. It is considered that the OIL designated area is capable of achieving a greater amount of employment floorspace than this in the right circumstances. The Local Plan is clear that the balances of uses within the OIL area will need to be focussed significantly towards employment uses and consistent with the Site Allocation policy 4.3, Policy B.1 and Local Plan Table 2 'Employment Clusters'.

The LCS, or any amended scheme, will provide the concentration of retail, leisure and community uses to create the new Local Centre within the site. This is limited by the Local Centre designation to 10,000sqm. Therefore, the balance of the non-residential floorspace provided on the remainder of the site is likely to be B Class employment uses.

EMPLOYMENT FOCUSED LOCATIONS

These areas should provide a focus for employment uses. The type of employment and workspace typologies to be provided also varies by location.

Other Industrial Location and Cook's Road

Table 2 of the Local Plan describes the Other Industrial Location as: “Land within B1c/B2/B8 Use Classes. Land between Cook's Road and River Lea, redevelopment opportunity with a significant proportion of employment use providing floorspace within a range of use B1–B8 Uses Classes alongside other uses, with an element of residential, providing a transition to the lower employment mix of uses within the remainder of Pudding Mill.”

This means that within the OIL, development should encompass larger scale B2/B8 footprints alongside introduction of smaller grain light industrial uses within B1c class. The form, density and format of employment use within this location will affect the form and extent of the buffer required along the eastern edge of Cook's Road between this site and the residential development beyond. Heavier industrial uses within B2 and B8 use classes within the OIL will require mitigation by careful placement

of more compatible employment uses along the eastern side of Cook's Road.

The placement of more compatible employment uses along the eastern edge of the OIL will enable the buffer along the eastern side of Cook's Road to be more diverse in relation to the mix of uses. In either case B2/B8 uses should be separated from residential by the introduction of B1c workshops, B1b research and development or similar.

The positioning of uses along the western edge of the OIL, alongside the River Lea, should consider the role of the waterfront and the OIL's role in providing a buffer to the A12.

Barbers Road West

Barbers Road West will have priority for B1b or B1c Class employment in stacked formats, with a movement away from office employment to light industrial uses as distance from the Local Centre increases. Workspace should be designed to meet the requirements of a variety of users with adequate servicing and building heights for a range of potential users.

REMAINDER OF SITE

The remainder of the site should be residential-focussed, however any non-residential uses should be in B1b or B1c use classes or ancillary A or D classes. These should be well-integrated with residential accommodation utilising stacked, or ground floor formats, with some potential for small-scale non-residential uses along the waterfront.



WORKSPACE TYPOLOGIES

The 2015 Employment Space Study identified a set of employment typologies within B Class uses that are specific and relevant to the Legacy Corporation area. Taking account of the Local Plan policies, and specifically the Site Allocation for Pudding Mill area, the typologies contained within Table 2 are considered to be appropriate for provision within each non-residential focussed area of Pudding Mill (see Appendix A for more detailed examples).

Principles of development form

Across the whole of the site, employment-generating uses provided should consist of employment uses on the ground or lower floors of mixed use buildings, subject to compatibility issues or employment uses in stand-alone buildings.

Proposals should:

- Avoid impacting large areas with blank façades along the ground floor or encouraging a monoculture of employment uses suited to ground floor only.
- Maximise flexibility for potential use by a variety of users including potential for future adaptation to other uses or sub-division including by providing appropriate floor to ceiling heights and adequate servicing
- Support the establishment and growth of research and development facilities across the area
- Maximise the use of active frontages along key routes and connections utilising high floor to ceiling heights along these routes
- Balance daylight and active frontages with privacy needs and practical internal arrangements.

Table 2- Generally appropriate employment typologies by non-residential focussed area

| Location | | Generally Appropriate Typologies (Employment Space Study 2015) |
|---------------------------|-----------------------|--|
| Local Centre | | Small Office Space Large Office Space including : <ul style="list-style-type: none"> • standard large office, • managed workspace, • incubator/accelerator/ co-working space Bespoke premises (part of an employment mix which includes retail, leisure and community facilities (Use Classes A1-A5, D1,D2)). |
| Barbers Road West | | Small Industrial Space Maker Space Managed workspace Incubator/accelerator/ co-working space Bespoke premises |
| Other Industrial Location | | Large Industrial Space Wholesale/storage space Small Industrial Space Business Yard Maker Space Managed workspace Incubator/accelerator/ co-working space Bespoke premises |
| Cook's Road | | Small Office Space Small Industrial Space Maker Space Managed workspace Incubator/accelerator/ co-working space and Bespoke premises |
| East -West Street | Close to Local Centre | Small Office Space Managed Workspace Incubator/accelerator/ co-working space |
| | Close to Cook's Road | Maker Space Managed workspace Incubator/accelerator/ co-working space |

Note: Source- the LLDC Employment Space Study (2015). For specific policy requirements and uses reference should be made to Local Plan Policy B.1 and table 2 (Employment Clusters) within the Local Plan 2015-2031.

CASE STUDY: RESEARCH AND DEVELOPMENT

The Legacy Corporation encourages the provision of facilities for higher education, postgraduate study and research, and wider research and development activity. Policy B.6 of the Local Plan states that this activity should generally be located within or at the edge of the Metropolitan Centre and Pudding Mill, or at the edge of Sugar House Lane or Here East employment clusters. Therefore Pudding Mill has potential to provide a unique opportunity in London to provide innovation within bespoke employment premises. Linkages between the Pudding Mill site and the Cultural and Education District proposals including University campuses could enable students and other innovators easy access to this hub of learning and research activity. Within the site this form of accommodation would be especially suited to Barbers Road West, in and around the Other Industrial Location (OIL) and the Local Centre.

The Employment Space Study (2015) provided some useful information on the types of industries and their requirements in relation to premises. Research and Development has specific requirements and are usually standalone bespoke buildings. The specificity of the build will depend on the end user. An organisation intending to build for their own use can be highly detailed in regards to their specifications to ensure that the space is fit for their purpose. For instance, heavy plant may be housed in a defined area of the site to allow for a more light construction of the main buildings and minimises the mechanical vibration that can otherwise be an issue for sensitive scientific equipment.

Another option discussed in the Employment Space Study is that of an incubator/innovation centre where facilities are provided for multiple occupiers to use the building for various biological research. However this also needs to be a bespoke building as the requirements for extraction, security, and strength of floorplate to support equipment to be designed into the building rather than being retro-fitted.

Bespoke buildings are likely to be open within 24hr formats and form workspace in a range of space sizes, including specialist laboratory rooms, office space, kitchens and write-up areas. Security considerations relating to the whole of the building and intellectual property protection will impact on interaction between different users. Designs are likely to incorporate deep suspended ceilings and reinforced floor plates to support weight of extraction equipment. A large portion of the building area is taken up by plant for ventilation, extract and servicing.

As identified within the study, small studio spaces could also house smaller scale research and development industries. In these cases units are likely to have lower ceiling, provision on any floor of buildings within occasional servicing requirements.



6B: DELIVERY OF HOUSING

Relevant Policy Objectives

3. To contribute to area-wide housing targets, delivering a mix of housing tenures and types, with a focus upon family housing

Delivery principles

Site Allocation SA4.3 requires that the site should provide a medium density, mixed use area incorporating a significant proportion of residential. This means the delivery of approximately 2000 homes across the whole of the site, maximising site potential in accordance with all Local Plan policies. The following sections provide guidance in relation to the form and type of residential appropriate for each character area within the site.

Medium density should be achieved throughout the whole of the site with opportunities for higher density particularly within the Local Centre. The following sections set out further detail in relation to appropriate densities.

Housing mix

Other Local Plan housing policies impact upon the delivery of these aims in terms of form, tenure and mix, as well as site-wide conditions.

Schemes should maximise affordable housing, with an aim to achieve 35% affordable housing and a 60/40 affordable rented/intermediate split. Ensuring that where national and/or London Plan policies on affordable housing are updated, that these are taken into account when defining the type and amount of affordable housing proposed within schemes.

The London Mayor's aspirations that sites within Greater London Authority ownership should provide 50% affordable housing are likely to impact upon delivery within the site. This will affect the LCS proportion of the site, where amendments will be expected to contribute towards achieving this goal. The Mayor's forthcoming Housing and Viability SPG will also provide guidance.

Development across the site should provide a range of housing typologies including flats, duplex flats, stacked and ground floor maisonettes and houses. Suitable housing typologies for the constituent parts of the site

are dependent on the form of development proposed, and are set out within the following sections.

In order to achieve these aims, proposals will also need to allow for ground floor residential use through flood risk mitigation measures. This should be achieved through individual building design, re-grading of land or positioning of non-habitable rooms. If flood risk mitigation measures are not considered or included non-residential would need to be located on ground floors across the whole of the site.

Schemes across the site as a whole should provide a significant proportion of family housing (more than 35% 3 bedroom plus units) and a balanced mix of 1 and 2 bedroom properties. The suitability of family housing across the different parts of the site is related to the presence of social infrastructure and other facilities, the proposed nature and form and avoiding the more employment-focussed parts of the site. Further details of where family housing should be focussed are set out within the following sections.

RESIDENTIAL FOCUSSED LOCATIONS

Outside the non-residential focussed areas described within the previous section, the remainder of the site shall focus on residential-led development and thus has the ability to deliver a greater proportion of the residential floorspace.

The quieter and more residential focus to the area will be reflected in lower densities. Residential accommodation should be in a range of types, including houses, stacked maisonettes and flatted development.

Lower densities also lend themselves towards a focus for family housing provision in these locations, which should include houses, ground floor and stacked maisonettes, duplex flats and other flatted development. Family housing provision should result in the delivery of upwards of 35% of properties 3 bedroom or greater delivered across the Pudding Mill site as a whole.

LOCAL CENTRE

Higher residential densities are most suitable within the Local Centre due to its central location, and good access to public transport and other facilities. Local Centres are also identified within

the Local Plan (Policy BN.10) as potential locations for higher building elements. This is likely to involve greater proportions of flatted development in this location, but across the Local Centre as a whole there is potential for a range of accommodation types including flatted developments, stacked maisonettes above commercial uses and some ground floor residential where integrated well with other uses and flooding concerns are mitigated.

The establishment of the Local Centre presents an opportunity to plan for social infrastructure, open space and playspace. The provision of these facilities in a central location means that the Local Centre will be less constrained than other established centres in relation to the provision of family housing. Therefore there is an opportunity to provide an element of family accommodation typologies within the centre in addition to the rest of Pudding Mill. In this location these are largely likely to be in the form of stacked maisonettes above commercial uses or duplex apartments. Family accommodation is generally less suited to higher building elements. Where family accommodation is provided in the centre, provision of car parking and other relevant factors need to be addressed satisfactorily.

EAST-WEST STREET

This street is likely to be a quieter route, containing residential and non-residential elements on the ground floors. At both ends of the street where non-residential uses will be focussed, residential accommodation will consist of flatted residential and

stacked maisonettes above non-residential uses.

In the remaining parts of the street, residential provision shall be in dedicated residential blocks comprising mainly flatted development, with potential for ground floor maisonettes and duplex flats, which can include family accommodation.

OTHER INDUSTRIAL LOCATION

The introduction of an element of residential within the OIL may be appropriate, ensuring that this does not prejudice the current or potential for future industrial uses. Redevelopment for new uses will be dependent on the ability of the proposal to meet relevant employment policies and achieve acceptable levels of environmental quality and amenity for the future residents of this part of the site.

Residential units should be located away from heavier industrial units, with potential for residential to be adjacent to lighter industrial workspace, subject to good design to mitigate against any adverse amenity impacts (see Appendix A in relation to compatibility between uses). Due to these constraints, family accommodation in the form of houses and ground floor maisonettes is less suitable within this location, however duplex apartments and flatted development may be suitable where compatibility and other environmental and amenity issues are suitably addressed through the scheme as a whole.



Residential use should not be spread out across the whole of the OIL. Overall the development in the OIL should be designed to provide transitional and buffer uses between residential and the heavier industrial uses that are promoted on the OIL.

COOK'S ROAD (OUTSIDE THE OIL)

Residential development in this location should not prejudice the operation of the industrial uses within the OIL.

Development should allow for transitional uses to create buffers between the industrial uses in the OIL and residential uses across the remainder of the site. The extent and form of the buffer required in this location is dependent on the level, use and format of employment development within the OIL. This will affect the suitability of different forms of residential.

Where the buffer between heavier industrial and a mix of lighter workshop and housing is located within the OIL, the extent and range of residential types within this location can be more diverse than if heavier uses abut the edge of Cook's Road, in which case a compatible mix between workshops and flatted development would be more suitable.

BARBERS ROAD WEST

Densities should reflect the ease of access to public transport and the local centre. As this area will provide an employment focus, residential provided

in this location will be lower in concentration and should be well integrated and compatible with this employment focus. This means that residential is more likely on upper floors of development within flatted developments or stacked maisonettes. Where residential use is proposed on the upper storeys, appropriate separation from other uses within the building would be required.

Proposals including residential within this location should additionally consider the requirement of the site allocation to not prejudicing the operation of the rail freight site to the north by appropriate design, including noise mitigation, siting and other mitigation measures. The nature of the site in relation to the railway line and employment uses mean that family housing is less suitable in this location.

SPECIALIST ACCOMMODATION

Other forms of more specialist accommodation may be provided within the area which would be subject to the specific Local Plan policies.

Any proposals for older persons' housing would need to accord with Policy H.3 in that they should be close to transport facilities of the DLR Station, bus routes through the site and along Stratford High Street, and facilities within the Local Centre. Proposals would also need to be well-integrated with other forms of residential and within quieter parts of the site away from heavier industrial uses, therefore most suitable within the residential focussed parts of the site.



7. TOWNSCAPE AND PUBLIC REALM

Proposals within the SPD area should deliver high-quality and sustainable development. The guidance within this section should help create an area with a new and unique identity, building upon the industrial heritage and local waterway character of the site and delivering to modern standards of sustainability and design.

INDUSTRIAL HERITAGE

The history of the site and how industrial processes have dominated the area in the past will influence future forms of development. Past features such as watermills, warehousing and other industrial buildings as well as historical brick production provide a context to area which can influence building form, materials and scale in the future. This provides an opportunity to be creative in design and provide a genuinely locally distinctive character.

The recognition of the past and present industrial context along with the contemporary reinterpretation of details in the new developments, will over time create a sense of identity for the area that responds positively to the wider local context, identity, character and distinctiveness of Pudding Mill. Despite there being little of the past industrial uses visible at Pudding Mill, the historical influences provide a cue for development proposals, and proposals should consider the following factors.

Variety and Character

Breaks in massing should be incorporated into the southern side of blocks to maximize daylight penetration whilst also contributing to creating an appropriate character and fine urban grain. These would make reference to the historic pattern of yards and footways from the site's industrial heritage.

Ground floor residential activity can be possible through the adjusting and grading of ground levels locally, within development plots to accommodate flood protection measures. For example, allowing the inner courtyards to be slightly raised, rather than defaulting to a blank or lined podium frontage and a larger scale of plot.

Careful consideration should be given to the transition between different street types within one building. Façades located on different typical conditions should have distinct elevational character whilst ensuring the whole building has a clear and legible identity. For mixed use buildings, elevations the distinction between ground and upper level uses should be reflected in the design, scale of openings and overall character.

Where adjacent to the waterway buildings should align and engage with the setting and not dominate the waterscape. Small changes in level offer opportunities for informal colonisation by soft landscaping.



Facade Design

Elevation design and layout will need to balance good quality of daylight with appropriate privacy. It will be important that environmental mitigation be integral to the character and appearance of proposed buildings and not seen as additional elements that bring unnecessary complexity to the elevation. Ground floor internal arrangements should ensure blank frontages are minimised. Punched openings with deep reveals reinforce the solidity of masonry form and definition to the elevation.

Materials should vary across buildings to reflect differences in mechanical function, but combinations maintain a common palette and tone and do not generate dramatic differences in material. Materials should consider how surfaces and public areas will age over time.

Residential buildings should be predominantly brick, stone, concrete or masonry, with deep window reveals to reinforce a sense of solidity. To create emphasis and definition on masonry building, simple ornamentation around openings should be considered. Timber cladding, lightweight composite cladding systems and low quality materials should

be avoided. It is important that metal and glass is used with refinement and consideration given to intricate texture rather than as large format cladding. Residential buildings should have recessed balconies along primary streets, and can have projecting balconies along secondary streets and waterfront, depending on overlooking issues and the presence of railway infrastructure noise.

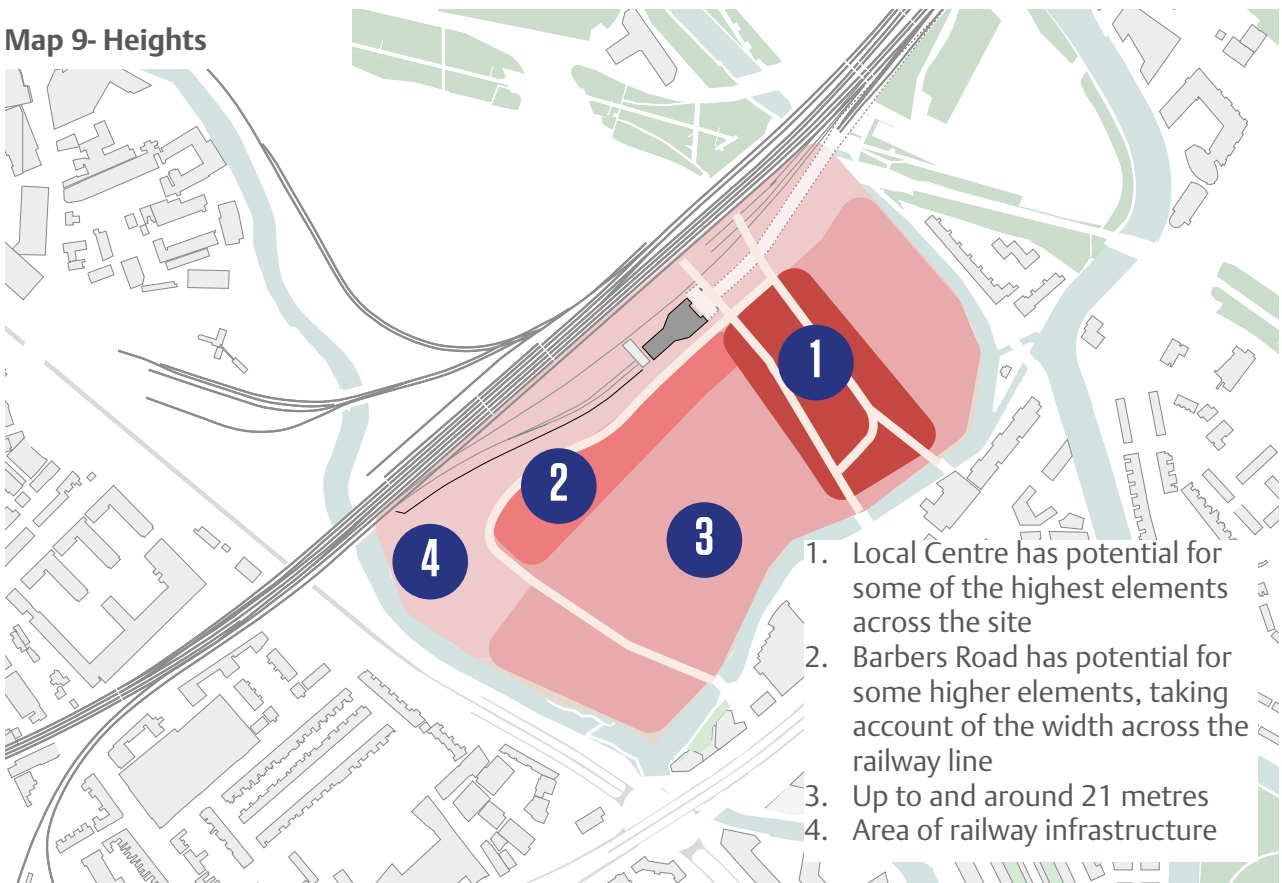
Employment buildings can be expressed in a finer material than the heavier brick and masonry of the residential blocks. Within the OIL, large expanses of glazing, louvres, and metal are considered appropriate.

Outdoor amenity at roof level should be maximised, and where not used as amenity, roofs should be green.

BUILDING HEIGHTS

As set out within the Local Plan the generally expected height across the site is up to 21 metres above ground level. However it is anticipated that across the site as a whole there will be variation in scale, heights and massing to create a distinctive and

Map 9- Heights





Copyright RMA

Residential

interesting townscape.

The guidance below sets out where higher and lower elements may be appropriate, which are graphically represented within Map 9. Other factors which may influence appropriate height are the presence of railway infrastructure; mitigating impacts of heights of, and design responses to Stratford High Street; and the influence of watercourses. Any proposal above the 21 metres threshold will be considered against the tests within Policy BN.10.

As identified within BN.10, due to its town centre status, the part of the site which will form the Local Centre offers potential opportunities for some of the highest elements within the site. The legibility of the centre, the definition of public routes and spaces and generating active street frontages will be key considerations when applying BN.10 tests at this location. Proposals should carefully consider siting and design, avoiding negative impacts on local amenity, in particular nearby open space.

The heights within the Marshgate Lane scheme reflect the proximity to the Local Centre where the highest element at 40 metres is located within what will be considered the Local Centre, stepping down as distance from this increases. This pattern is generally considered appropriate for this part of the site, with the tallest elements located within what will become the Local Centre, with its appropriate mix of uses, and heights stepping down as distance from the local centre increases and the residential proportion increases.

Barbers Road is also considered capable of taking some higher elements, with the creation of active street frontages and the relationship with street widths across the railway line being key factors for consideration. The impact on the nearby open space



Copyright RMA

Employment

will also be a key consideration in this location. The impact on scale and grain will also be a particular consideration should the western end of the street be re-aligned to create smaller blocks on either side of the road. The employment focus of this area and the greater floor to ceiling heights will mean that BN.10 will be triggered at a lower number of storeys. The potential for stacked format employment to form greater mass will need to be respected and reflected in appropriate heights.

Within the remainder of the core development area of the site lower heights should generally adhere to the 21 metre expected height set out within the site allocation, which amounts to approximately 7 storeys of residential, or fewer where mixed use development is proposed. Any proposals for higher elements within this location will be rigorously assessed against the tests within BN.10.

Heights within the Cook's Road scheme at a maximum of 25 metres were justified with reference to Policy BN.10 but reflect the location further away from the Local Centre.

The maintenance of low-level infrastructure at the sub station, Crossrail and railway lines will mean that heights within these locations will be low, reflecting what is currently present on the site. It is not anticipated that a considerable amount of development will take place within this part of the site.

SCALE AND MASSING

The overall aim is to recreate the fine-grained heritage of many nearby areas. Massing should therefore be informed by the location, existing and proposed building forms within the site and the

wider area.

The built form of new buildings across Pudding Mill should create a distinct character and urban grain. The grain should be fine, which does not lend itself to large podium developments. The area should be highly legible and easy to navigate around with a diversity of flexible spaces for servicing and amenity. It should be characterised by varying sizes of urban plots composed of multiple and amalgamated buildings and dramatic steps in height between buildings, making reference to the variety of the historic industrial urban grain.

Longer blocks may be broken down through defined breaks or steps in massing and form of at least 2 storeys. Articulation in roof forms should be integral to the built form and express their function. Residential buildings should be articulated to appear smaller or of at least a similar scale to employment blocks, to give emphasis to the importance of employment and industrial uses. Different residential formats may also impact upon the scale and massing of residential blocks.

Scale and mass of buildings should avoid overshadowing the public realm and open space provision.

Within the OIL and other employment-focussed areas of the site, massing should reflect the role and requirements of the form of employment uses. Heavier massing within the OIL should reflect the industrial past and to integrate better with the solid and robust character of the residential uses, it is important that façade treatments to the industrial uses introduce a finer grain texture to façades that reflect the simple intricacy of past buildings.

Adjacent to the remaining parts of the waterways development form should reflect the quieter location with smaller tighter grains and lower massing avoiding dominating the public realm elements and routes.

Across the rest of the allocation, tighter, even and consistent grain, enhancing permeability with small and intimate mix of uses and spaces.

SOFT LANDSCAPING AND BIODIVERSITY

The Lower Lea Valley is characterised by rivers and streams, wet woodlands, open waters and marshland. This character should be reflected locally by utilising suitable landscaping measures and



planting. The wider setting and Queen Elizabeth Olympic Park in particular sets standards in terms of quality, functionality, green infrastructure and design typologies. Due to the proximity, these elements may usefully inform the landscape approach within the site.

Softer landscape measures such as tree planting, native planting and other soft landscape elements linked to ecology measures within the Thames River Basin Management Plan will contribute to character, quality, environment and biodiversity. They will also contribute to the hierarchy of streets and spaces, combat the urban heat island effect, mitigate some aspects of pollution and provide seasonal change. Street trees, planting and other soft landscape features should relate closely to the proposed use and type of space. Species selection should relate to the ecological character of the wider area, creating links with other habitats in the wider area where possible.

The London Plane tree can be utilised for shade along primary routes, enabling colour and interest. Opportunities for foraging along towpaths and pedestrian routes, smaller-scaled trees along residential streets and a variety of scaled trees and planting in small parks and open spaces should be utilised.

The maintenance and management of vegetation and street trees should be considered within the design proposal. Preference should be given to those which do not require severe reduction or maintenance.

SUSTAINABILITY AND CLIMATE CHANGE

MITIGATION

The comprehensive nature of the development of the site provides a unique opportunity to deliver high standards in sustainability and climate change adaptation. This can be achieved through various measures including, utilising sustainable drainage systems, rainwater and grey water harvesting and recycling as well as encouraging behavioural change to reduce water demand. There is also potential for maximising building fabric energy efficiency and incorporating green infrastructure measures, including green walls and green roofs to assist in climate change mitigation and noise minimisation, as well as provide amenity and opportunities to grow food.

As an area that is or will be predominantly clear and available for new development, Pudding Mill presents the opportunity to optimise the approach to carbon reduction through energy provision as well as building fabric design. This should be done through following the principles within the London Plan:

1. Be lean – using less energy through design of buildings and use of building materials
2. Be clean – supply energy efficiently utilising opportunities for heat network connection/

provision as a first choice

3. Be green – using renewable energy through inclusion within or on buildings in order to meet any carbon target gap.

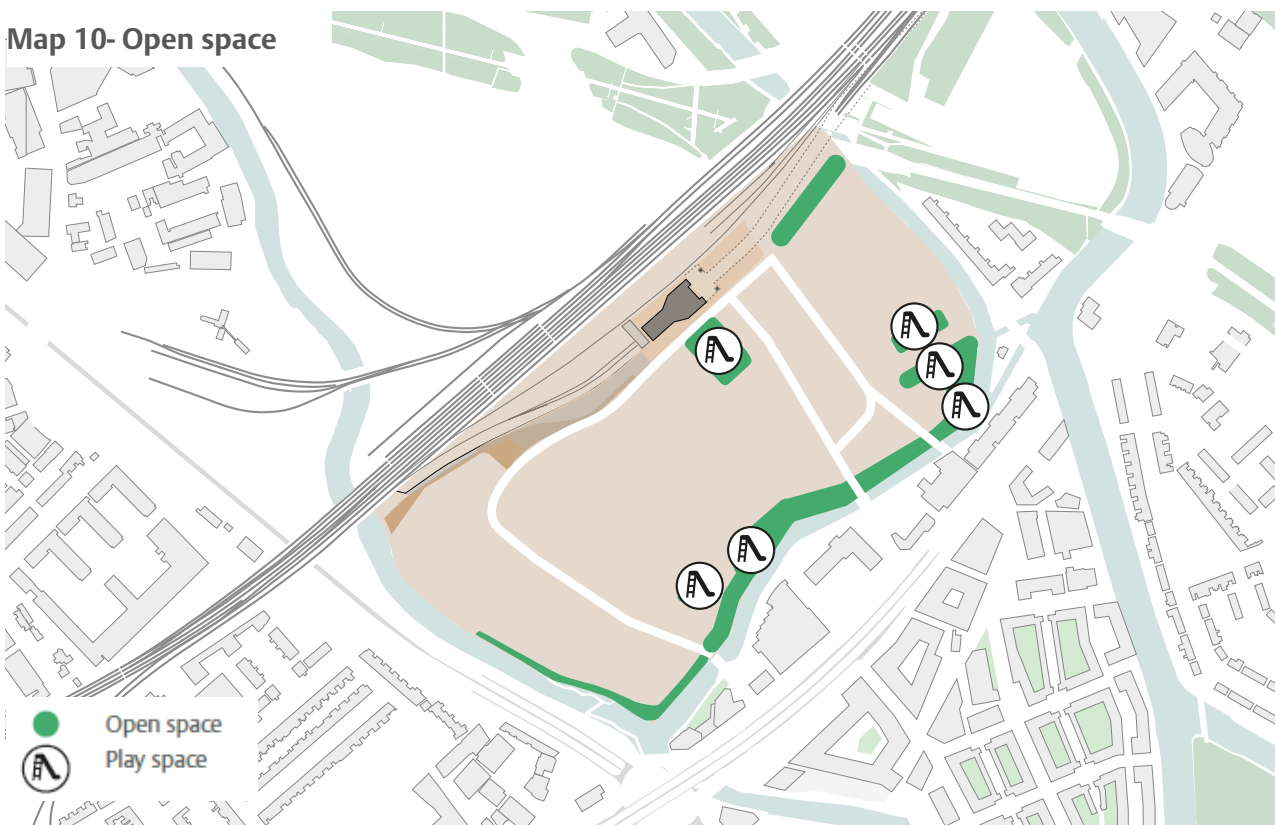
The option of a carbon offset payment should only be utilised where measures taken through all three areas within the above energy hierarchy have not achieved the policy set carbon target. See the Carbon Offsetting SPD for further information.

Heat Networks

The first preference for the provision of heat to new development within the Pudding Mill area is for a connection to the existing heat network. This represents the most energy efficient option requiring extension of the existing network from the Queen Elizabeth Olympic Park area.

Should this connection not be possible, the option of a Pudding Mill heat network should be considered, with landowners working together to deliver a localised heat network with the potential to connect all new development. Only where neither option proves feasible should individual development site solutions such as on-site Combined Heat and Power (CHP) or Combined Cooling Heat and Power (CCHP) systems be pursued. Where this is the option chosen or where development proposals have been

Map 10- Open space





permitted that have their own on-site energy solutions, these should be designed to allow a future connection to a wider heat network. In principle, heat network main pipe routes should follow streets or other readily accessible routes.

In addition, as site is in close proximity to the Air Quality Management Area, proposals will be required to submit air quality assessments. Use of Travel Plans, public transport improvements and cycle parking alongside pedestrian and cycle prioritisation within the site should minimise air quality impacts arising from within the site. Potential utilisation of a heat network connection of localised CHP network, described above would also help protect air quality in preference to individual boilers in each property/building.

OPEN SPACE

Open space across the site should provide quiet enclaves and places of reflection, where appropriate, should be designed to function as Local Open Space. Map 10 provides an overview of suitable locations. London Plan open space standards should be adhered to and function provided in accordance with the position on the hierarchy reproduced on page 85 of the Local Plan.

The open space should provide a variety of functions including court games, children's play, sitting out or nature conservation areas, with an appropriate

balance between each function as routes, leisure and playspace.

Open space intended for sitting out purposes should maximise visibility and views across the area as well as being overlooked for security and be oriented to maximise daylight and sunlight hours. Open space should be used as routes to other places, so should not fall at dead ends. Route elements should not dominate and landscaping should reflect the function of the open space and hard landscaping should not dominate.

Landscaping measures should be used to ensure a seamless link between open spaces and surrounding buildings. Informal and more formal spaces should be provided across the site as a whole.

Buildings around the areas of open space should be of an appropriate scale and not cause adverse environmental impacts such as excessive shading and formation of wind tunnels through the spaces. As such impacts would harm the amenity value offered by the open spaces.

Location and function of open space

A large open space should be provided within the site provide a focal point in close proximity to the facilities of the Local Centre. This will provide a focal point to the site and the centre, meeting the everyday requirements of residents and workers within the area.

This space will offer a gathering place, an area for community events, playspace and elements of urban greening providing shade and assisting in the enhancement of the biodiversity of the area.

A majority of the remaining open space should be provided in multiple smaller locations scattered across the site to provide a variety of green enclaves, aiding the provision of a distinctive and green environment. This multiple, small-scale provision is considered most suitable given the site's close proximity to the metropolitan provision at Queen Elizabeth Olympic Park. These small spaces should include opportunities for children's play and pocket parks providing a space for passive recreation, seating, playspace and linear open spaces along the canals and towpaths.

The creation and enhancement of the towpath will provide additional open space to serve both local residents and neighbouring communities.

PLAYSPACE

Provision of playspace and youthspace within Pudding Mill will mitigate identified deficiencies in open space and playspace, including youthspace. Provision of new playspace across the whole of the site allocation should meet London Plan standards in relation to the proposed population of the development proposed.

The provision of playspace across the site should provide for a range of age groups from children's playspace to youth and adult provision and inclusive



and accessible playspace. Multi-use games area (MUGA) provision should provide social space as well as sports provision.

Each of these spaces will provide a legible function and should be designed with the function and age range as a prime consideration. The form of the playspace will impact upon location with more formal play areas being located in more secure formally defined spaces. Where play space forms part of a continuous waterfront, only informal play space should be assumed.

The location of playspace should provide a multi-functional element to areas of open space across the area and doorstep play facilities should be well-positioned in relation to family housing provision and well-connected to pedestrian, cycle and bus routes. The use of roofs, terraces and indoor space may be considered an alternative to ground floor outdoor provision, subject to safety considerations, the type, form and function, and the location of other areas of provision.

Where possible play space and/ or public art should be bespoke and relate to the historic context with integrated play equipment. Playspace provision should be designed in accordance with best practice guidance including imaginative and, where appropriate, involve an element of challenge or risk, consider the changing climate and the seasons, and be appropriate to their location in relation to access and safety. Where possible children and young people should be engaged within the design process. Appropriate management arrangements should be secured for new playspaces.

In addition to playspace provision, developments should also ensure that the public realm becomes safe and more welcoming for children, young people and their carers.

Requirements for sports provision should also be met in line with Local Plan policies.

PUBLIC REALM AND STREETSCAPE

Good quality public realm and associated landscape will emphasise character, street hierarchy and quality. It should accommodate a range of varying functions which could include, but not be limited to, access and movement, play, recreational activity, biodiversity and water management (e.g. SUDs).

The public realm shall respond to the needs of a

variety of users, taking into account how it is used by different groups, for example providing informal opportunities for play as well as socialising or relaxing while considering accessibility issues. It should facilitate social interaction, providing potential opportunities for temporary street stalls and allow for free and convenient pedestrian movement including careful positioning of street furniture.

Development should include appropriate overlooking and be illuminated to appropriate levels to facilitate a safe environment.

High quality public realm near to the rail arches will weaken the presence of the railway as a physical barrier. This could be enhanced by making use of the space below the DLR viaducts or land adjacent to the Greenway Ramp for the public benefit by activation as MUGA or other leisure/recreation use.

Consideration should be given to the interface between buildings to the south of the station along Barbers Road and the railway line.

Street furniture, lighting and surfacing

Proposals should ensure a consistent palette of high quality street surfacing materials, street furniture, public art, lighting and signage to ensure continuity in design and appearance, crucial to creating a unified sense of place and aid orientation.

Use of surfacing and street furniture should demarcate the primacy of routes, including an integrative approach to combining functions, for example, lighting, refuse and bike storage to minimise clutter. A consistent use of off-the-peg elements including bins, lighting, wayfinding, cycle parking and street furniture should be specific and adopted across the whole of the site. The use of complementary bespoke street furniture should be considered at key junctions and spaces to help create the feeling of distinct places within Pudding Mill, being most appropriate in areas of open space and along river frontages. Consideration should be given to how play equipment can harmonise with street furniture concepts.

Street activity, footfall and volume of vehicular movements will influence the materials used. Areas which experience the greatest levels of pedestrian and vehicular movements will have an increased need for clear and defined edges for the street and pavements. Conversely for quieter routes, measures such as shared space and greening of the highway through careful street planting can provide a more



sedate environment.

Street lighting should enhance the experience for the pedestrian and cyclist, providing safe and accessible environments. Consideration should be given to how lighting can influence the volume and pace of traffic on the various routes across the site, for example utilising warmer and lower height lighting in areas of public space, and along vehicular routes such as Barbers Road and Marshgate Lane utilising durable and simple lighting schemes.

Wayfinding

Legibility and permeability across the site in general should minimise the need for signage. Signage should be positioned at key strategic junctions including key entrances to the site along Marshgate Lane, Cook's Road, adjoining the Greenway and adjacent to the DLR station.

Where necessary wayfinding signs should be well-positioned, consistent and well designed, utilising the 'Legible London' signage system.

At key locations, 'streetscape art commissions' should be provided: well-designed, distinctive urban design elements in the public realm that will aid navigation through being memorable. These might be a particular surface, a distinctive piece of landscape, or a designed relationship between buildings, as well as a distinct, designed object.

The wider area has a great many landmarks, both established and recent. The opportunity for these landmarks to aid navigation across the site should not be missed. Visual connections between them and the

spaces of Pudding Mill should be retained and improved.

Where new streets or pedestrian routes are created, the naming of these new routes should be taken as opportunity to further embed new development in the history of the site, and should be precise and accurate in terms of where names and references are derived from. Barbers Road and Cook's Road both refer to industries that used to exist there, and this approach, of referring to business names, key individuals, products and processes, should be adopted as a first port of call in any naming proposals.

DAYLIGHT AND SUNLIGHT

Daylight and sunlight considerations will have impacts on the design of buildings across the site. Proposals should consider positioning in relation to daylight and sunlight to avoid overshadowing, in particular within parts of the site affected by taller elements of schemes on the High Street or where new taller elements are proposed within the site. Particular consideration should be given to the impacts on the waterways.

Proposals should consider daylight and orientation to maximise potential use of the public realm and areas of open space. Daylight and sunlight assessments will determine impacts on an application-by-application basis.

FLOODING AND SURFACE WATER MANAGEMENT

As shown within Map 11, a majority of the site is located within Flood Zone 3, with small areas within Zones 1 and 2. The site benefits from flood defences so there is only a residual risk of flooding.

The flooding constraints will impact upon the detailed requirements of planning applications submitted. Proposals within the site will each be expected to carry out a site-specific Flood Risk Assessment (FRA).

The level of detail of the FRA depends on the development, the flood zone and the vulnerability classification. Within the site, detailed assessments will be required for all uses with the exception of public open space. Flood risk assessments should utilise the most up to date flood and other mapping and methods for calculating climate change. Detailed assessments should utilise Environment Agency hydraulic models or develop new models where not available. The FRA should determine the suitability of Sustainable Drainage Systems (SuDS).

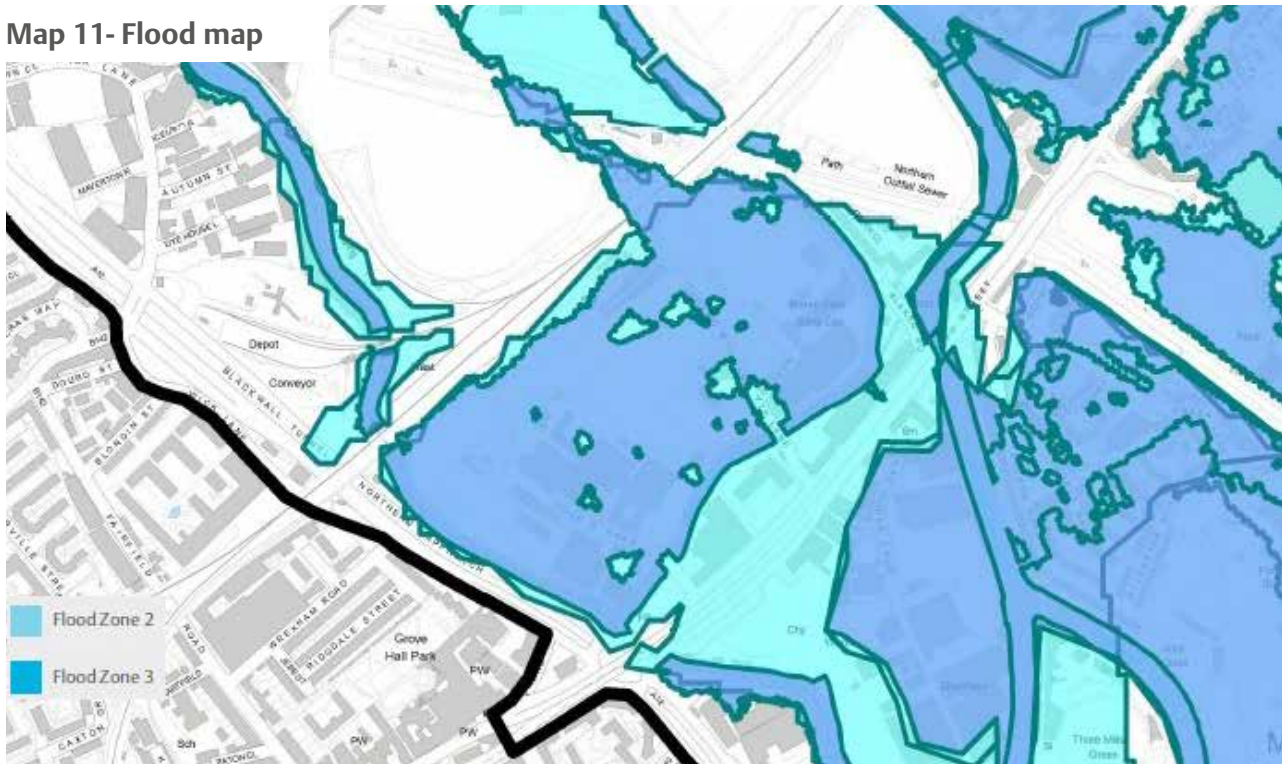
Appropriate measures to tackle the major constraint flooding places on residential development include:

Location of uses

- Setting development back from the watercourses by a minimum of 8 metres



Map 11- Flood map



- Seeking opportunities to locate water compatible development to Flood Zone 2 and 3 and move vulnerable development to Flood Zone 1
- Careful placement of lower vulnerability within development plots to act as a secondary flood defences
- Consideration of safe access from development sites and providing a means of escape, which is particularly important on this island site

Design

- Designing flood resilience and resistance measures into the design and the building fabric
- Re-grading of land and increasing the height of the finished floor levels to Environment Agency guidance
- Placing ‘living accommodation’ away from ground levels
- Placing ‘less vulnerable uses’ on the ground levels
- Avoiding basements in Flood Zones 2 and 3

Flood defence measures

- Maintain, enhance or replace flood defences , or replacing river walls to provide adequate protection for the lifetime of the development
- Improving access to existing flood defences
- Securing provision of, or contributions towards flood risk management infrastructure, where appropriate

- Presumption against culverting and investigating opportunities to de-culvert watercourses

Sustainable Drainage Systems (SuDS)

In accordance with the latest Government Guidance regarding climate change the area should be assessed as being in the Upper End and Higher Central allowance categories for River Flow and Rainfall Intensity. It is recommended that all sites considering redevelopment undertake climate change modelling to ascertain the best methods to mitigate flood risk for the future users/ residents of the proposed development.

Sustainable drainage systems should be utilised and methods with water quality, attenuation and storage, habitat and landscape management should be considered before other options. Options involving rainwater discharge into the watercourse should be applied in the first instance, with the aim of reducing surface water flow into the wastewater and sewerage system.

The London Borough of Newham has a number of detailed requirements in relation to surface water management. All developments should aim for greenfield discharge rates and include at least one ‘at source’ SuDs measure resulting in an at source improvement in water quantity or quality discharge into the sewer. The LB Newham will be consulted on all proposals within the site in their capacity as Lead



Local Flood Authority.

The likelihood of land contamination will also influence the specific SuDS measures suitable for the site. Suitable measures may include use of impermeable membranes or linings, designed to attenuate water on or near the surface and profiling of small green areas into shallow basins so that they naturally store rather than discharge rainwater.

Contaminated land is rarely suitable for soakaways. Using these techniques, measures such as permeable paving, filter strips, bio-retention areas and underground storage may be suitable. Other measures such as green roofs, rain gardens and rainwater harvesting are suitable throughout the site.

Other considerations include taking account of potential for flooding from sewers. The aim should

be to achieve Greenfield runoff rates. On a scheme by scheme basis applicants are encouraged to propose different suitable SuDS solutions.

Limited land availability may impact on the form of SuDS utilised within the site so new ponds, larger swales and wetlands are less likely to be employed. On a scheme by scheme basis applicants are encouraged to propose different suitable SuDS solutions which will be approved through the planning process.

There is an expectation that there will be a detailed strategic site surface water management system considered for each of the sites coming forward in Pudding Mill and where possible the neighbouring systems will be taken into account in order to create a comprehensive and coordinated network of surface water management schemes across the whole area.

WATER SUPPLY, WASTEWATER AND SEWERAGE

Through development proposals developers should demonstrate that there is adequate water supply, waste water capacity and surface water drainage both on and off the site to serve the development. This may involve studies to ascertain whether the proposed development will lead to overloading of existing water and/or waste water infrastructure for existing or new users.

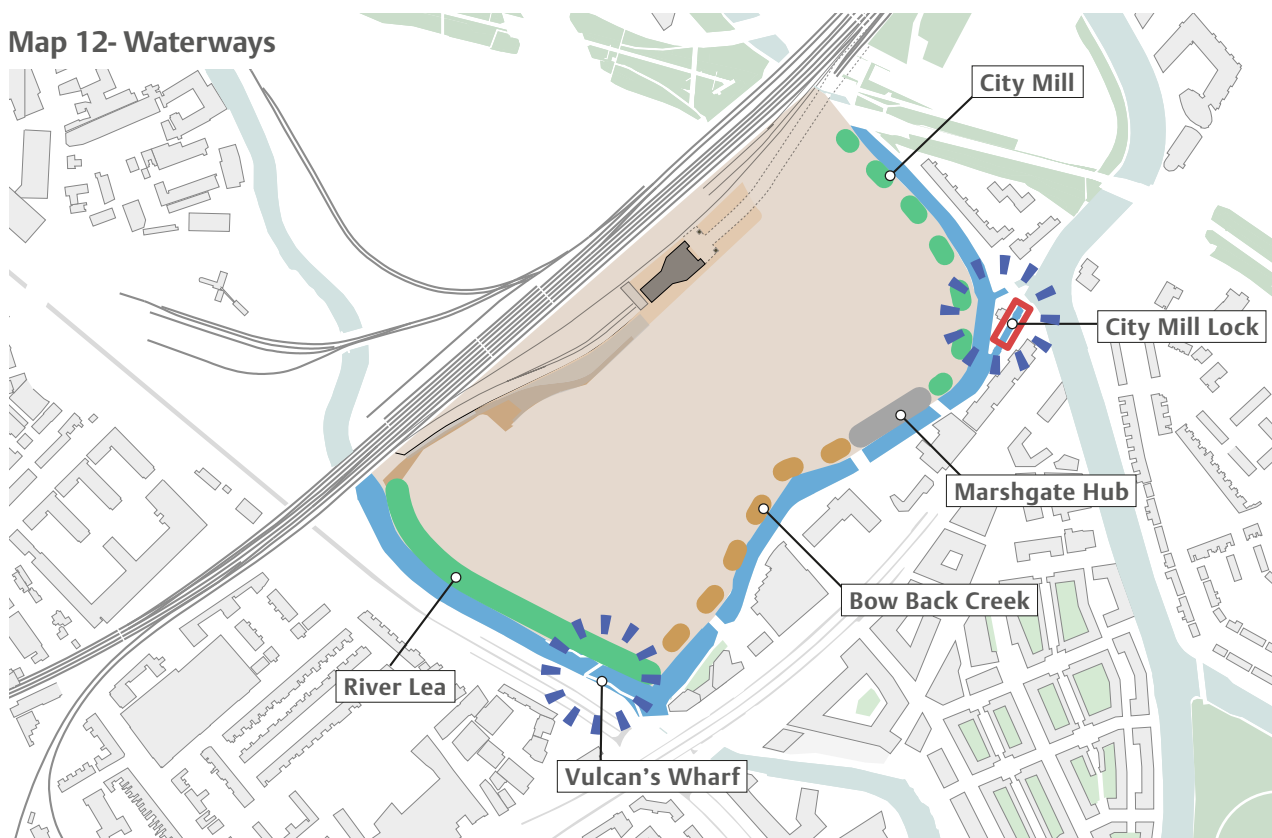
Drainage must maintain separation of foul and surface flows. Where there are identified capacity constraints the developer should set out appropriate improvements and how they will be delivered.

WATERWAY MANAGEMENT

The waterways are a crucial part of the identity of the Pudding Mill site, bordering the island on three sides. They provide opportunities to enhance connectivity within the area and beyond, potential for use for transport as well as provide public realm and community activity.

The Lea Navigation is classified as a Water Framework Directive heavily modified waterbody within the Thames River Basin Management Plan, therefore measures should be applied to improve this status.

Map 12- Waterways



The Olympic Legacy Waterways Framework has set several aspirations for the Pudding Mill area:

- Access from Pudding Mill Lane Station to the River Lea Navigation towpath.
- Continuation of informal visitor moorings north of the A12 and south of the Old Ford Locks and along the Hertford Union Canal.
- Continuous towpath access from City Mill Lock to the River Lea Navigation,
- Restoration and interpretation of the City Mill Sluice Gate.
- Angling opportunities around the City Mill River and Bow Back River.

Local Plan Policy BN.2 encourages the multi-functional use of the waterways, for habitat enhancement, connectivity and recreational activities.

Principles for development

The aim is to enhance the waterway and the towpaths by benefiting the natural and physical environment. This should facilitate the integration

and improvement of the waterways along the Lee Navigation, City Mill River and Bow Back River.

Development should face towards the waterway, provide open, safe and connected spaces with natural surveillance at each part of the day as well as enhance biodiversity functions. It should not compromise continuous towpath access across the site, opening and widening in places to create open space and amenity areas.

Parts of the site adjacent to the waterway should provide identifiably distinct characters with parts providing publically accessible open space, encouraging quiet enclaves while others provide routes across the site or where non-residential uses are proposed, are designed to enable spill out from the community/commercial uses. The use of hard and soft landscaping proposals should provide diversity in waterway treatment across the site edges.

The towpaths, especially those along the Lee Navigation, should be treated as connectivity routes as part of the Lee Valley Walk route and should therefore include the continuity and coherence elements as described in the Lea River Park Design

Manual.

The waterways surrounding the site have the potential to become a community recreational facility whether for walking and cycling opportunities or for waterborne activities, with further potential also for visitor moorings within the site. Consideration should be given to retaining existing flora and fauna features along the waterways as far as possible.

Opportunities by location

As shown within Map 12, different parts of the site provide opportunities for different measures for improving the waterways.

City Mill- A green edge should be formed. Within the limits of access and maintenance requirements which can potentially incorporate more private amenity backing onto the river edge, with the pedestrian route pulling inland from the waterfront. This allows the conservation of the existing trees along the bank. This area has a softer relationship with the riverfront, with potential to maintain existing in channel habitat along Pudding Mill bank.

Bow Back Creek- A towpath edge along the northern bank should reflect its man-made heritage but with the introduction of appropriate soft landscape and tree planting. This area should contrast with the Marshgate Hub in that it respects the industrial heritage but is a more appropriate place for soft landscaping and tree planting. This should incorporate waterfront open space, promote fishing and connections. This area of riverbank requires the most improvements.

River Lea- A green edge that maintains a robust and screening boundary to the SIL to the north, Crossrail sites and adjacent industrial uses along the River Lea. It continues the more natural character of the River Lea, introducing indigenous species appropriate to the location, principle planting structures, include a choice of materials which age over time and greenspace along the waterfront.

The junctions of waterways, flyovers and bridges at Vulcan Wharf create a raw but distinctive spaces that can be enjoyed at multiple levels. There is the opportunity for greater public space at this corner to take advantage of southerly aspect, and a more distinctive building form with a unique relationship to the river edge.¹

OTHER SITE SPECIFIC CONSIDERATIONS

Proposals should consider how waste and recycling facilities can be integrated into the development. Potential for large-scale, sustainable waste solutions to be applied across the site or parts of the site.

Smells and odours arising from the existing waste site may impact upon the phasing and design of proposals whilst this remains. Following the re-location of this site in accordance with Policy IN.8, proposals will need to consider the potential remediation requirements of this land before development can take place.

Proposals adjacent to the railway line should make allowance for the DLR North Route double-tracking Phase 2.

Subject to the above, there may be potential for the western end of Barbers Road to be re-aligned in a more southerly location away from the railway line. This will impact upon the block format to the north of Cook's Road/Barbers Road, and could create an additional thin block adjacent to the railway. In this case, this small block should be suitable for employment uses, while the smaller block on the northern edge of Cook's Road could take on a more residential character. If this option is progressed, proposals would need to consider how best to integrate and/or screen the Crossrail site from other more sensitive forms of uses.

Buildings with adjacencies to the electricity sub-station should be carefully sited, with effective boundary treatments and landscaping measures where appropriate. Consideration should also be given to how this space can assume similar character to other employment spaces across the development area. Design measures also have potential to screen the OIL from other uses, which may also enable the introduction of more sensitive uses nearer to the designated part of the site.

The location of buildings across the site should take into account the overshadowing and the prevailing wind and the impacts that the development will have on the surrounding environment, especially on areas of public realm and the waterways.

The setting of heritage assets adjacent to the site will also impact on designs for development within the south-eastern edge.

1

8. STREET DESIGN AND GUIDANCE

PRINCIPLES

Redevelopment of the area will create new streets, spaces and places, and within this it is important to provide coherence. Providing a tight and intricate series of blocks and streets will provide greater permeability, ensuring Pudding Mill stands as its own neighbourhood. This section sets out how the design principles within the previous chapter should be applied on an character area basis.

Streets should each have their own identifiable function, demonstrating their role in regard to priorities shared between pedestrians, cyclists and vehicular users. Local Streets will be created (see Mayor’s Road Task Force, 2014), designed as spaces and public realm. Streets should also be considered as spaces not corridors, with buildings, landscape and open space integrated as one, with some on-street parking and servicing uses helping to give animation and life alongside active frontage.

Buildings to primary streets across the site should be designed to create a strong sense of definition with a composed and ordered character. Generally roof lines must be simple and well defined and the design of ground floors allowing for continuous active frontages. Secondary street facing elevations have a more informal character reflecting the secondary nature of the network of smaller streets.

All streets should generally achieve a width to height ratio of between a minimum of 0.6 to 1 and a maximum of 1 to 1.

Design features, such as street trees and varied street widths, should act as traffic calming measures. creating interest through the use of curved or irregular street patterns alongside more formal straight streets, at all times giving due consideration to street hierarchy and the creation of a sense of place.

ACCESS AND SERVICING REQUIREMENTS

Heavier industrial uses within the OIL require off-street servicing by heavier goods vehicles with dedicated hard-standing and servicing bays, as well



as some dedicated car parking provision.

Workshops, and research and development are also likely to require on and off-street servicing bays and hard-standing but for smaller vehicles, with some limited car parking provision. Other employment, retail and community uses may require more limited, time-limited servicing with very limited car parking provision.

In residential focussed areas the on- and off-street residential parking standards as well as cycle provision will influence street form.

FOOTFALL AND TRAFFIC VOLUMES

The provision of a new bus route from Sugar House Lane through the site to Queen Elizabeth Olympic Park will provide greater footfall and traffic volume in a northern/southerly direction. Other areas with greater pedestrian activity will be around the Local Centre, and around the DLR station and along Barbers Road.

Heavier vehicular use should be expected around the OIL on Cook's Road. The street format should discourage these users from travelling eastwards across Pudding Mill along the East-West street, access to the OIL should be gained from the south-west corner only. Some heavier vehicles may traverse the area along Marshgate Lane from the Strategic Industrial Location to the north.

INTENDED ROAD USERS

Pedestrians and cyclist priorities along the predominantly residential streets will influence the form by ensuring pavements are of sufficient width and cycle routes are appropriately signed and accessible, related to CLoS assessment levels. Residential vehicles as the predominant road users along certain residential roads, and potential for on-street parking will influence form through set back parking provision, tree planting and other landscaping measures, and street calming initiatives.

The route for buses along Marshgate Lane into Queen Elizabeth Olympic Park will influence form to ensure the highway has sufficient width for two-way running, turning circles and viewpoints as well as ensuring that bus stops are designed and correctly positioned. Heavier goods vehicles travelling to the

OIL at the south-west corner of the site will require Cook's Road to be sufficiently wide to accommodate such vehicles.

LOCAL CENTRE

Adjacent to the DLR station, incorporating the northern ends of Pudding Mill Lane and Marshgate Lane ground floor active uses will create street-level activity in town centre uses, with flatted residential or other town centre uses above.

Commercial units on the ground floor shall reflect the central location through generous floor to ceiling heights, maximising flexibility but also providing distinctions between the upper storeys. The units should provide for a variety of uses and not be of uniform appearance. Where the use of ground and upper storeys differ between commercial and residential, this should be reflected in distinctions in form and materials.

The public realm should be designed to provide a focal point to the area, and commercial properties should provide an extension of this realm.

The street should be suitable for private and commercial vehicles, with pedestrian and cycling prioritisation. Servicing bays and bus stops to be provided. Some of the widest street widths should be along Marshgate and Pudding Mill Lanes within the local centre to reflect the users, profile of the area, but also measures introduced to limit vehicular speeds and encourage heavier vehicles to avoid the Local Centre.

MARSHGATE LANE

Marshgate Lane is designated as a key connection within the Local Plan. The route should be designed as the principal north-south route through the site, maximising footfall by drawing pedestrians and cyclists down this route.

The role and importance of this route should be reflected by some of the widest street widths. The street should be suitable for the main bus route through the site, which will also be reflected by the provision of bus stops. It should also be suitable for all types of vehicles with pedestrian and cycling, as well as the servicing requirements of commercial uses. In this location the provision of multi-functional space will incorporate generous floor to



Copyright David Kohn Architects



Copyright Peter Barber Architects



Copyright Duggan Morris Architects



Copyright DK/CM



Copyright DSDHA



Copyright Tim Crocker // Feilden Clegg
Bradley Studios

ceiling heights. Active ground floor uses in the majority with maximised potential for looking inwards and outwards.

Workspaces should integrate well with the public realm where possible. These may be interspersed with some non-active elements facing towards the street, depending on the suitability of the building form and use. Blank elements should be minimised, but use of design, materials and grading to enable continuation of character.

PUDDING MILL LANE

The maintenance of existing infrastructure along Pudding Mill Lane will influence the form of the street design. Opportunities to bring the electricity sub-station into the streetscene through effective boundary treatments should be investigated in collaboration with the landowner. This should include use of appropriate materials

This route is identified within the Local Plan as a key connection to be enhanced (on road) so following development this route should enable vehicle, pedestrian and cycle movement. Proposals along this route should enhance the function of the route for pedestrians and cyclists, in particular. This will also involve maximising active ground floor uses with potential for looking inwards and outwards. Measures to increase overlooking and activity at all times of the day should be utilised. This should provide a quieter north-south route through the site compared to Marshgate Lane.

Provision of multi-functional space will incorporate generous floor to ceiling heights. Workspaces should integrate well with the public realm where possible. Blank elements should be minimised, but use of design, materials and grading to enable continuation of character. Streets should be suitable for all types of vehicles with pedestrian and cycle prioritisation.

BARBERS ROAD

Forming part of the key connection across the site, Barbers Road will be predominately a one-sided street with railway line and station on northern side, and employment uses in dedicated stacked formats on the southern side. The presence of the low level Crossrail site at the corner of Barbers/Cook's Road will also strongly influence the streetscene to the west.

The street should reflect its location adjacent to the railway through enhancing activity on the ground floors through windows, balconies and doors onto the street. The presence of the railway line and extended footpath width to the north will give a feeling of openness to the street beyond the street width, therefore street widths may be narrower than within the Local Centre.

The potential to re-align the western end of Barbers Road would create additional blocks to the north, adjacent to the railway line which would help screen the Crossrail site as well as reduce the feeling of expanse across at this end of the street.

The entrance to and from the Local Centre and the station needs to be visible and draw footfall through it through use of design and materials.

COOK'S ROAD

Large-footprint but low-rise dedicated heavier employment space, with smaller, mixed use blocks to the west and to the east transition between employment and to flatted residential.

Dependent on final designs, heavier industrial uses on the western side of the street (in the OIL) may result in some breakages in the frontages. Design and material uses should mitigate against any change in character.

Any lighter forms of employment positioned on the western edge of the street should maximise active frontages where possible through street-facing windows. The eastern edge of the street should be more mixed use in character incorporating active frontages through doors and windows onto the street, but design also needs to consider the heavier good vehicles likely to frequent this road potentially through some set-backs.

Cook's Road forms part of the key connection identified within the Local Plan, therefore should involve a vehicular street suitable for heavy vehicles. This will be reflected in the highway width to ensure safe passage of these heavy vehicles and provide for servicing requirements, with safe separation from pedestrians and cyclists.

EAST-WEST STREET

Non-residential uses are likely to be provided on the ground floor of this new street. These uses should provide street level activity. With retail, community

and leisure uses being provided closer to the local centre, and employment towards the western end of the street. Any ground floor residential accommodation blocks should either be stepped back from the footpath or be designed with privacy zones so as not to have ground floor windows opening out directly onto the street.

The east-west street will introduce a new route across the site and is identified as a key connection to be enhanced within the Local Plan. The street should be suitable for regular vehicles with pedestrian and cycling prioritisation. Requirements of the non-residential uses will require time-limited servicing bays and some limited car parking provision. The street width to reflect residential nature of the road and not encourage the use of it as a through route for heavier vehicles accessing Cook's Road.

WATERWAYS AND RIVER ROUTES

Some limited opportunities for non-residential active frontages adjacent to the river at Marshgate Lane will create opportunities for private space to open out into the public realm. In these locations the width of the routeway should widen to allow uses to spill out onto the route.

Apart from as described above and within the OIL, uses along the waterway are likely to be largely residential, with properties facing the water. The waterway should become extension to properties with a public feel. Doors and window facing outwards towards the river, windows to give sense of over-look and strong integration between inside and out, where appropriate, and balconies enabling activity to spill out onto street.

Canal facing buildings should form an ensemble of buildings of varying scales along the canal edge. Elevations will be seen from a variety of scales and vistas, so should be characterised by large scale articulation, including groupings of floors. Ground floors encourage a permeable and generous relationship between public uses and canal side terrace spaces.

In addition to their connectivity function, the routes along the waterways will create vital green space, opening out into areas of peace and reflection. This will involve the integration of public realm as informal play areas, with safety considerations. Boundaries should integrate with the public realm along the tow path, rather than enclosure to provide

an open environment.

Routes along the waterway should give priority to pedestrians and cyclists, with some limited potential for vehicle access only. Therefore carriageway will be narrowest in these locations. Footpaths and cycle paths to be set back from the water's edge, creating an open and active environment. These routes are identified as key off-road connections and connections to be enhanced within the Local Plan.

The need to promote a safe, user-friendly environment will influence street form in terms of security measures and over-look. Lighting along the routeway will need to strike a balance between impacts on wildlife and public safety.

SECONDARY RESIDENTIAL STREETS

Secondary streets shall be created to provide new routes across the site. There will be narrower street widths in these locations, reflecting their secondary nature taking account of potential for some on-street parking provision. The routes should be suitable for private vehicles, facilitating low speeds with pedestrian and cycle prioritisation.

The secondary streets should primarily be in residential use. Following suitable flood alleviation measures creation of some ground floor residential activity through openings out into the public realm, use of balconies and maximising windows. Following all other flood risk mitigation options being exhausted there may be potential for some stepping up to ground floors if well-positioned and designed to add privacy and overlooking. Consideration also need to be given to the national housing standards.

Boundary treatments should provide sense of enclosure in suitable locations. The public realm to maximise security and opportunities for informal play with overlooking and privacy for the residential properties. Ensuring key distinctions between public and private space.

9. DELIVERY AND IMPLEMENTATION

RELEVANT POLICY OBJECTIVES

- Securing and providing new roads and walking and cycling connections through the site and links to the surrounding area
- To provide infrastructure to support development including provision of new and enhanced bridges and underpasses, open space and playspace

DELIVERY

Implementation of the redevelopment of the Pudding Mill area will take place over a number of years and phases within a number of different planning schemes.

This SPD aims to provide policy guidance which will endure over the lifetime of the Local Plan to 2031. However, at present there is considerable development pressure and there are already some planning permissions in place. The aim is therefore to provide an overall and consistent delivery strategy and ensure that different development schemes complement each other and result in coherent and comprehensive development across Pudding Mill.

PHASING CONSIDERATIONS

The transformation of Pudding Mill is likely to take place predominantly over the next 10 years and will occur across the site in a phased manner, between different proposals and sites. Careful consideration of phasing of development and infrastructure will be required to ensure a successful community at each stage. The indicative phasing is set out within Map 13.

- Sites at Marshgate and Cook's Road have secured planning permission¹ and thus are likely to come forward from 2017 onwards. These early developments, coupled with the new DLR station will set the tone for the area.

¹ Marshgate subject to signing a Section 106 agreement

- A key factor inhibiting development at present is the location of the Crossrail works which are taking place at the north-west of the site. Once these works are complete the northern part of the OIL area will again become available. It is anticipated that this will take place from 2018.

- It is also likely that the northern side of the Cook's Road site will come forward in the medium-term, subject to the relocation of incompatible uses within the waste site.

- As is currently permitted, the Pudding Mill element of the LCS development is likely to come forward from 2022 onwards. Changes to the LCS within PDZ8 may mean that this could come forward slightly in advance of this. This development has been phased within 2020 to 2025 within the Local Plan.

Although there are some parts of the site which have potential to be delivered in advance of this, parts of the site are also subject to further phasing considerations such as the need to relocate the incompatible waste transfer site and the impact of the current industrial uses within the OIL on phasing of the eastern part of Cook's Road. Any different phasing to that above would need to demonstrate that the phasing does not have negative implications on amenity, on deliverability of the overall aims for the area, or compromise timing or delivery of key infrastructure, or policy requirements.

Phasing on individual sites should also ensure that non-residential uses are provided alongside residential development and affordable housing in advance of other housing, secured as such through conditions or Section 106.

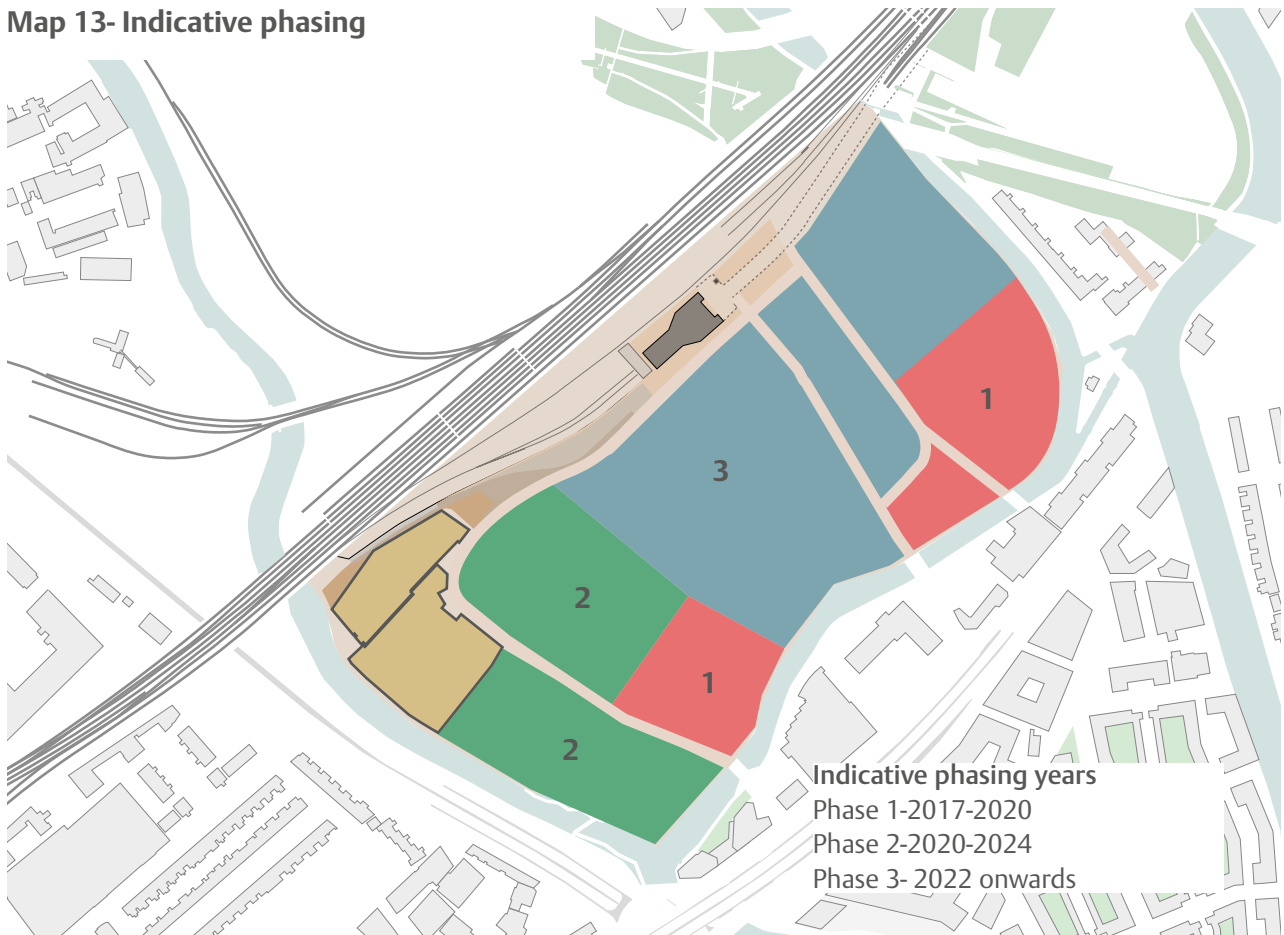
Where phasing, or other factors inhibit the ability to develop the site in the short term, interim uses could be added to create vitality and vitality across the site.

INCOMPATIBLE USES AND CONSTRAINTS

There are a number of uses currently located within the site which are either incompatible with the mixed use development proposed, or place considerable constraints on the form and location of development within the site.

The waste site use at the western part of the site

Map 13- Indicative phasing



places considerable environmental constraints on development through noise and odour which inhibits the delivery of mixed use development in close proximity. This constraint and the requirement for land to facilitate the delivery of the east-west street will mean that the waste site uses would need to be relocated.

The planning policy requirements in relation to the relocation of waste uses will be dealt with via Policy IN.2 (see Local Plan). The Legacy Corporation expects that the relocation of the site can be achieved in a range of different measures (by priority):

1. Developers bringing forward the land through direct negotiation with the owners and operators of the waste transfer site
2. Landowners working together with the Legacy Corporation to assemble land and re-locate the waste use
3. The Legacy Corporation utilising its full range of planning powers to acquire the site and bring forward development.

The electricity sub-station along Pudding Mill Lane places constraints on the form of development along

this key route. Development form needs to respond to this constraint by consideration of:

- Maximising active frontages along Pudding Mill Lane as much as is possible
- Working with the landowner in relation to measures to screen the sub-station and boundary treatments
- Preventing the creation of ‘dead spaces’ surrounding the sub-station.

The Crossrail sub-station to the north of the OIL also places a constraint on the form of development within this location. Consideration should be given to the form of development and potential uses and users within this location to avoid any adverse amenity impacts.

Map 14- Infrastructure

INFRASTRUCTURE PROJECTS

The provision of new and enhanced infrastructure will be fundamental to the development of Pudding Mill. The following list (see corresponding numbers on Map 14, where applicable) shows the infrastructure projects which will need to be delivered across the site.

Represented on map:

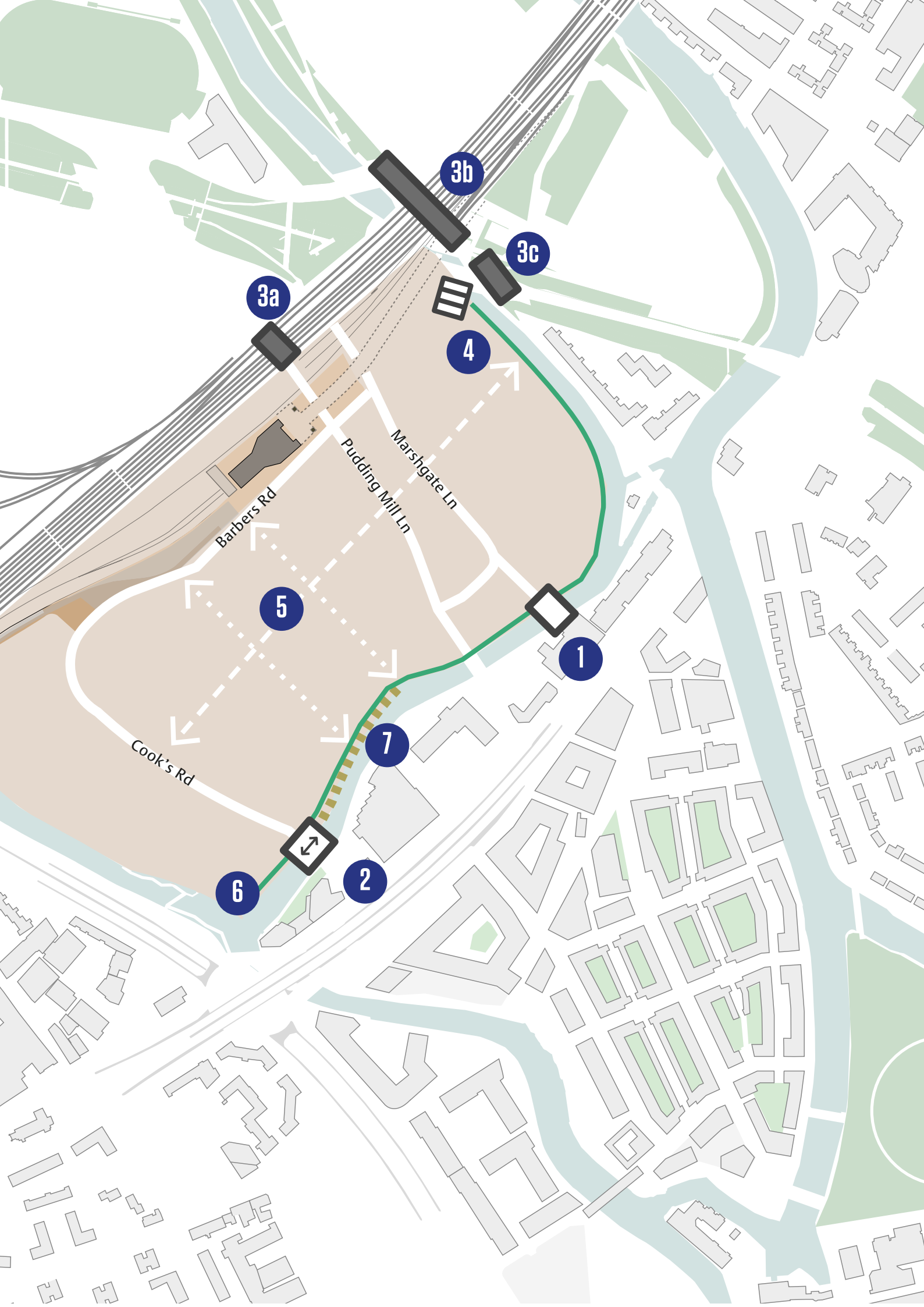
1. New bridge across Bow Back River at Marshgate Lane suitable for bus, cycle and pedestrians and link across High Street to Sugar House Lane
2. Widening of Cook's Road bridge to allow for pedestrians and heavy goods vehicles
3. Improvements to underpass below railway lines to access Queen Elizabeth Olympic Park and Bridgewater Road
4. New steps down from the Greenway into north-eastern corner of site
5. Central east-west street
6. Improved pedestrian towpath and route along north bank of Bow Back River including river wall repairs
7. River wall repairs and improvements

Other requirements across site:

- Connections to Combined Heat and Power (CHP)
- Other connections across site
- Road resurfacing and improvements
- Playspace to standards
- Open space to standards
- Infrastructure identified for Pudding Mill within PDZ8 (nursery, community, walk-in centre, Safer Neighbourhoods).
- Land adjacent to the railway to be safeguarded North Route double-tracking Phase 2

The following sections provide some additional detail in relation to each of these identified projects with reference to funding sources and roles and responsibilities.





INFRASTRUCTURE FUNDING

Delivery and associated costs will be secured, subject to relevant legal requirements, through a combination of CIL, S106 obligations, and third party funding, where available.

Community Infrastructure Levy (CIL)

Mayoral CIL has been charged since April 2012 and Legacy Corporation CIL from 6th April 2015. Although the Legacy Corporation is a charging and collecting authority, for the purposes of Mayoral CIL it is charged according to the rate in the parent Borough, therefore Mayoral CIL in the Pudding Mill SPD area is £20/sqm.

Full information on the LLDC Charging Schedule can be found on the website at: <http://queenelizabetholympicpark.co.uk/~media/lldc/cil/cil%20documentation%202015/lldc%20%20cil%20approved%20charging%20schedule.pdf>

There are currently no items of infrastructure proposed to be funded through CIL within the Pudding Mill area. Therefore it is anticipated that much of the necessary infrastructure will be funded through S106 and other funding streams, where available.

Section 106

The Legacy Corporation's Planning Obligations SPD sets out the role of S106 and likely requirements within the whole of the Legacy Corporation area. It sets out that Section 106 obligations are likely to be sought for infrastructure such as public realm, training and employment initiatives, and open space across the area.

At Pudding Mill, contributions are likely to be sought for new bus services, flood relief works and strategic off-site highway works as well as the key projects listed below, dependent on the site's location. The location of the AQMA adjacent to the site may also mean that contributions are sought towards air quality monitoring.

Infrastructure funded through development

The following projects have the potential to be funded through a range of sources with a focus on S106 developer contributions, linked to developments within the vicinity, and other public grant or project funding where available:

Widening of Cook's Road bridge. This will allow for pedestrians and heavy goods vehicles on both sides of the road. In addition to funding already identified, where scheme viability and wider priorities allow,



contributions towards delivery will be sought from development schemes within the site. This should be brought forward at the earliest opportunity, linked to timing of development within the OIL and Cook's Road. Triggers for delivery will be identified in conjunction with the development of schemes through the planning process, to ensure that the circumstances of those schemes are taken into account. Some funding has already been secured.

Marshgate Lane Bridge. This involves a new bridge across Bow Back River at Marshgate Lane suitable for buses, pedestrians and cycles. Land has been safeguarded for the new Marshgate Lane bridge within the consented developments either side of the river. Where scheme viability and wider priorities allow, contributions towards delivery will be sought from development schemes within the site. The Legacy Corporation will also continue to work in partnership with TfL and London Borough of Newham to consider sources of funding, project delivery mechanisms and timing of delivery.

New and enhanced connectivity links. Contributions towards these linkages may be sought from schemes, subject to the relevant legal requirements. These projects include:

- Underpass improvements below the railway line to Queen Elizabeth Olympic Park
- Underpass connection below railway lines between Stratford Waterfront East and the Bridgewater Road site
- Steps down from Bridgewater Road site to access the north-eastern edge of the Pudding Mill site
- Underpass below the Greenway from Bridgewater Road to access towpath

Junction improvements at Stratford High Street gaining access to the new bridge at Marshgate Lane. Within the area, contributions will be sought from schemes where appropriate.

Delivery of these projects will involve work between developers and the Legacy Corporation, TfL and London Borough of Newham in relation to the bridges and junctions.

The delivery of the key east-west street rests within a number of different ownerships, and the link across the whole of the site depends on release of land from (and subsequent development of) the waste transfer site. The road itself will be delivered as part of the development on the Legacy Corporation's land and the northern part of the Cook's Road site.

The following shall be assumed as development costs:

- Provision of new roads and connections across the site (including potential for re-alignment of Barbers Road)
- Connections to CHP
- Improved pedestrian towpaths
- River wall improvements
- Playspace to standards
- Open space to standards

Infrastructure elements identified for Pudding Mill within the LCS shall be provided through the scheme, and/or any amendments.

Other potential sources of funding

Projects initiated and managed by Transport for London may provide some funding for infrastructure delivery at this location. Proposals under the Bow Vision involve a number of projects relevant to the area, including:

- Providing pedestrian and cycle crossings to improve access to Pudding Mill site
- Providing new infrastructure to enable a new bus connection across Stratford High Street between Strand East and Pudding Mill Lane sites.

DELIVERY ROLES AND RESPONSIBILITIES

It is important to outline the roles and responsibilities of key stakeholders in relation to delivery. Uniquely the Legacy Corporation plays the role of the Local Planning Authority in terms of setting out planning policy and determining planning applications. The Legacy Corporation, through the policies and proposals in its Local Plan and the guidance in this SPD will be seeking to use its planning powers and wider responsibilities to achieve delivery of these objectives. This will also involve partnership working with other agencies including London Borough of Newham and Transport for London.

The Legacy Corporation also has Compulsory Purchase powers therefore, under a strict set of circumstances and if deemed necessary to deliver the comprehensive development of the site it has the ability to seek a Compulsory Purchase Order.

The Legacy Corporation is also a major landowner within the site therefore also has landowner and

developer responsibilities, where it will prepare the planning applications associated with its own land. As a major landowner the Legacy Corporation will also work with other landowners to help deliver the comprehensive development of the site.

The London Borough of Newham has a range of statutory responsibilities as the Local Authority including being the waste management authority and the highways authority. Other landowners and developers will play their role by submitting planning applications to the Legacy Corporation, and delivery of consented development and elements of key infrastructure across Pudding Mill.

Crossrail Ltd and Transport for London (TfL) are responsible for delivering strategically important transport projects in the area, such as Crossrail and proposals for double-tracking of the Docklands Light Railway (DLR). Land is currently being utilised for the implementation of Crossrail on the north-western part of the area; and land would need to be safeguarded to the north of the area for the delivery of the DLR expansion project. Other TfL responsibilities fall within the Bow Vision project.

The Environment Agency and Canal and River Trust will play a part in delivery thorough ensuring proposals meet relevant environmental standards and mitigate against any potential harm to the environment and the waterways within the area.

Developers and their partners will be expected to submit comprehensive planning applications which will be assessed against the Local Plan's policies, demonstrating how proposals help to deliver the key aims, objectives and requirements of this SPD. Section 106 agreements will also be utilised to ensure infrastructure and utilities, and affordable housing are phased appropriately. Conditions on planning permissions will be used where necessary, to make to development acceptable.

OTHER DELIVERY CONSIDERATIONS

The Legacy Corporation will apply the principles within the Mayor's emerging Housing and Viability SPG. Where viability assessments are sought each assessment will be subject to independent review by a suitably qualified practitioner appointed by the Legacy Corporation. It is expected that the associated costs will normally be borne by the applicant.

It is recommended that applicants enter into pre-application discussions with the Local Planning authority and other relevant bodies, where appropriate, prior to submitting any application.

It is also likely that proposals will also be subject to design scrutiny at the Quality Review Panel at an appropriate stage in the development of the proposals.

APPENDIX A- EMPLOYMENT TYPOLOGIES

The **Employment Space Study (2015)** identified six key workspace types, of which five are suitable and relevant to Pudding Mill. These typologies are shown within Table A.1 below.

Table A.1- Employment space typologies

| Space type | Sub-type | Characteristics |
|-------------------------|--|---|
| Small office type space | | <ul style="list-style-type: none"> <500m² Low ceilings Let as one unit Typically on lower storeys as part of residential developments Professional and business services Conventional working hours Use Class B1 (a) |
| Large office type space | Standard large office | <ul style="list-style-type: none"> >500m² Low ceilings Let as one unit or multiples Provision on any floor Professional and business services Conventional office hours Use Class B1 (a) |
| | Managed workspace | <ul style="list-style-type: none"> Office units ranging from small to medium cellular spaces (10-140m²) Low ceilings Let as individual unit or workspace within a unit, both with shared facilities Professional and business services Conventional office hours |
| | Incubator/ accelerator/ Co-working space (IAC) | <ul style="list-style-type: none"> Floorspace for 5-50 desks >743m² desirable Let as individual desk space or workspace within unit from IAC provider Flexible leasing arrangements Start-ups, SMEs, freelance workers Conventional office hours |
| | Bespoke premises | <ul style="list-style-type: none"> Large-scale premises with bespoke spatial requirements Research and development, bespoke manufacturing, professional and business services |
| Studio type space | Small creative studio | <ul style="list-style-type: none"> Small scale 11-32m² 3.5m preferred ceiling height Provision on any floor Creative industries and services, artists Some loading space required Hours of operation can be outside conventional working hours Use Class B1 (b) or B1 (c) |
| | Large creative studio | <ul style="list-style-type: none"> Large space allowing for flexible uses; up to 500m² 3.5m preferred ceiling height Better suited to ground floors Creative industries and services, artists Some loading space required Hours of operation can be outside conventional working hours Use Class B1 (b) or B1 (c) |

| | | |
|--------------------------------|-----------------------------|--|
| Small industrial/ warehouse | Small industrial space | <500m2 Long term leases for whole unit High ceilings (4.5-8m) Best provided at street level Loading bay required and large entry spaces Hours of operation outside conventional working hours Small scale making and light manufacturing, secondary/tertiary industry Use Class B2 and B8 |
| | Maker space | Individual units 150-200m2 within larger space Short term, flexible leases for workshop spaces High ceilings (4.5-8m) Best provided at street level Loading bay required and large entry spaces Hours of operation outside conventional working hours Small scale making and light manufacturing, secondary/tertiary industry Use Class B2 and B8 |
| Large industrial/ warehouse | Large industrial space | >500m2 Double height ceilings (6-8m) Leased as individual units on longer term leases Loading bay required Best provided at street level with high entrances Hours of operation outside conventional working hours Large scale heavier manufacturing, secondary/tertiary industry Use Class B2 and B8 |
| | Wholesale/ storage space | >500m2 Double height ceilings (6-8m) for wholesale, lower (2.4m) for self-storage Leased as individual units on longer term leases Loading bay required Best provided at street level with high entrances Hours of operation outside conventional working hours Large scale self-storage, wholesale storage Use Class B2 and B8 |

The Study also provides high-level indications of the compatibility of the workspace with residential and other forms of employment uses. This is summarised within Table A.2 below.

Table A.2 Compatibility

| Residential compatibility | Neighbourhood | Block | Building |
|---------------------------|---------------|-------|----------|
| Small office | - | - | - |
| Large office | - | - | + |
| Studio | + | + | + |
| Small industrial | + | ++ | ++ |
| Large industrial | + | ++ | x |
| Employment compatibility | Neighbourhood | Block | Building |
| Small office | - | - | - |
| Large office | - | - | - |
| Studio | - | - | - |
| Small industrial | + | + | ++ |
| Large industrial | + | ++ | ++ |

Key- Design- Few design considerations; + increased design considerations; ++ considerable design considerations; x mix not supported)

See the full version of the Employment Space Study for details of typologies, suitable end users and compatibility information. This document is available on the Legacy Corporation's website.

APPENDIX B- INDUSTRIAL HERITAGE STUDY

Although the industrial heritage and character of Pudding Mill is not preserved through large historic buildings, it can still be read in the arrangement of plots, names, activities and fragments of building archaeology.

NB- This appendix is for contextual guidance and should not be interpreted as highlighting particular buildings or structures for preservation.

There are many industrial areas across London where building stocks have remained in use and adapted easily to modern mixed employment and residential communities. These distinctive areas, from Southwark to Hackney, offer large Victorian-built warehouses, yards and former factories that create a clear sense of solidity and scale and density that and adapt relatively easily into vibrant new creative communities.

Pudding Mill's own industrial heritage is as significant and important to the history of London. Starting from the original Bow porcelain, to early soap and chemical works, to the first AC power stations and nuclear research, it has contributed through its constant adaptation and evolution to the latest industries, in part as an isolated island that was liberated from connections into an immediate residential neighbourhood.

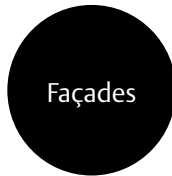
Its future is as a much more integrated community, but not one that forgets its industrial and employment past. It requires a sensitive approach to the design of new buildings that seeks to draw on this history, both preserving small details of boundaries, surfaces and material within the landscape, and reflecting the quite particular relationships between buildings and massing within new development. This should seek to evolve the employment and residential character out of the industrial form of Pudding Mill, rather than impose an homogenous set of residential typologies that bear little resemblance to the variety of scale and form found now and throughout the history of the site.

To understand its character and the potential implications we have mapped and illustrated a range of small but distinctive details, and 'lost' buildings from the past from historic photos and drawings. This helps define aesthetic principles that underpin the ongoing character of Pudding Mill, to be preserved through future development.

Summary of principles:



Large massing formed from simply joined different sized volumes. Each component volume keeps a consistent rhythm and composition across its façades.



Façades for each volume show strong and consistent rhythms across their full width and height expressed in openings and frames.



Materials vary across a buildings to reflect differences in mechanical function, but combinations maintain a common palette and tone and do not generate theatrical differences in material.



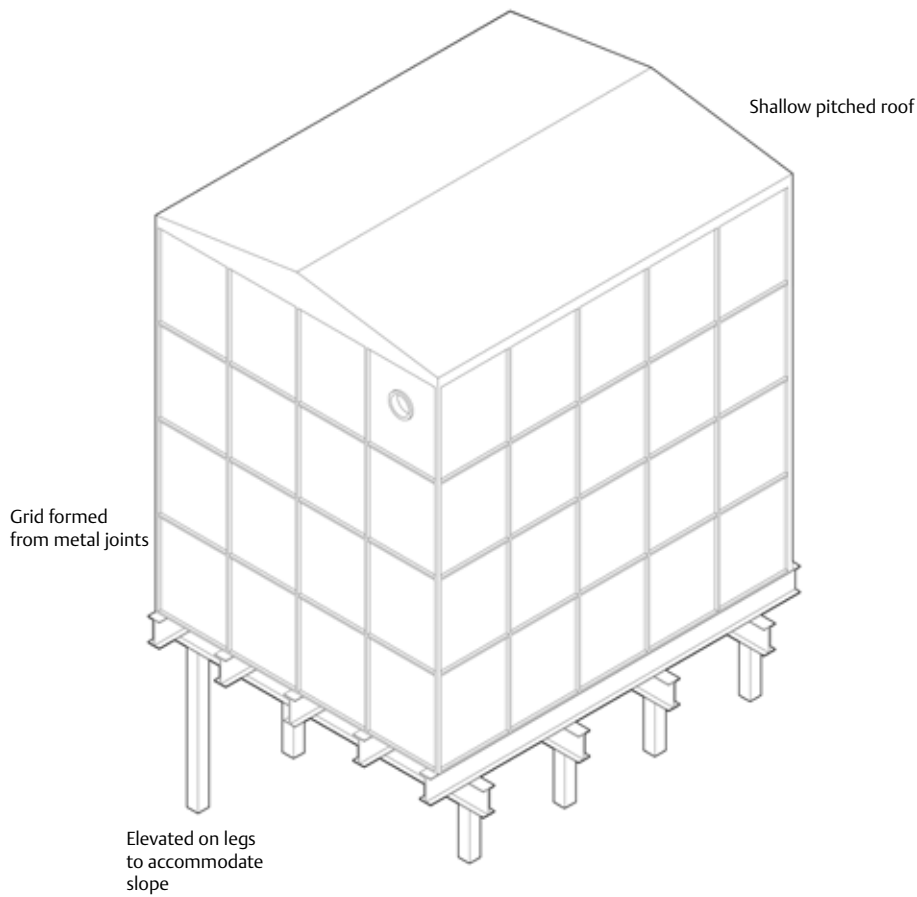
Delicate and simple ornamentation to give emphasis to openings and building elements



Materials incorporate a tough but fine grain of patterning and complexity across simply drawn façades. This adds an intricacy and informality.



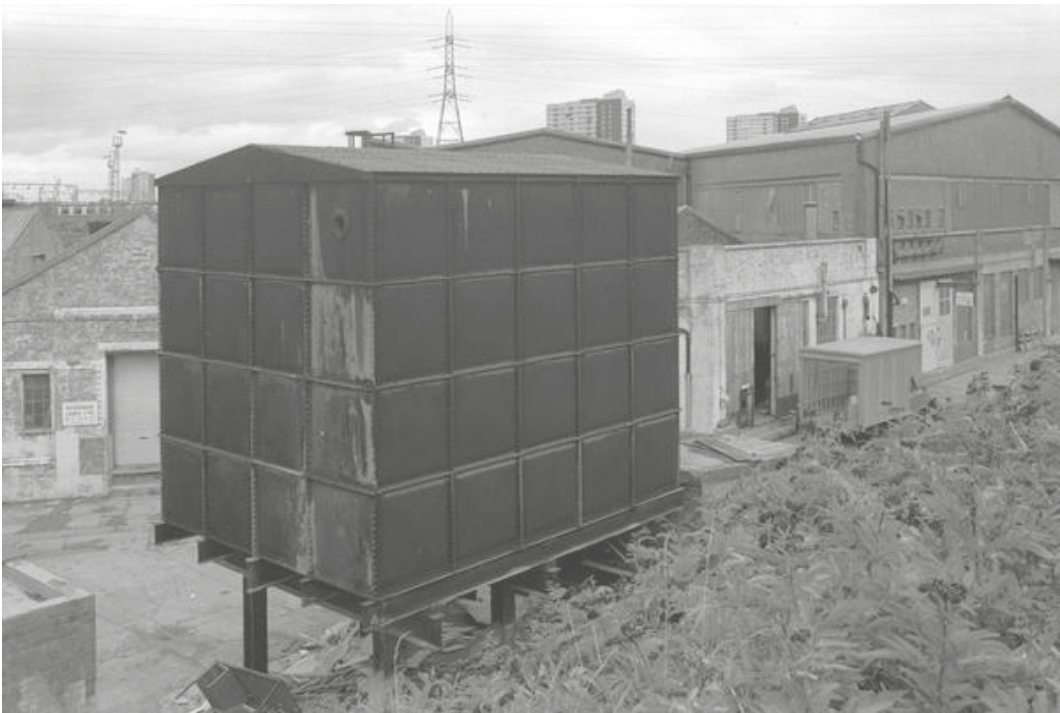
Buildings align and engage with romantic setting of the waterfront and are subservient to the bigger landscape. Changes in level and the edge are treated simply to emphasise eccentricity and romance offering opportunities for informal colonisation by soft landscaping.



Materials

Weight and mechanical purpose finds expression in the wider context

Small units and pieces alongside larger buildings



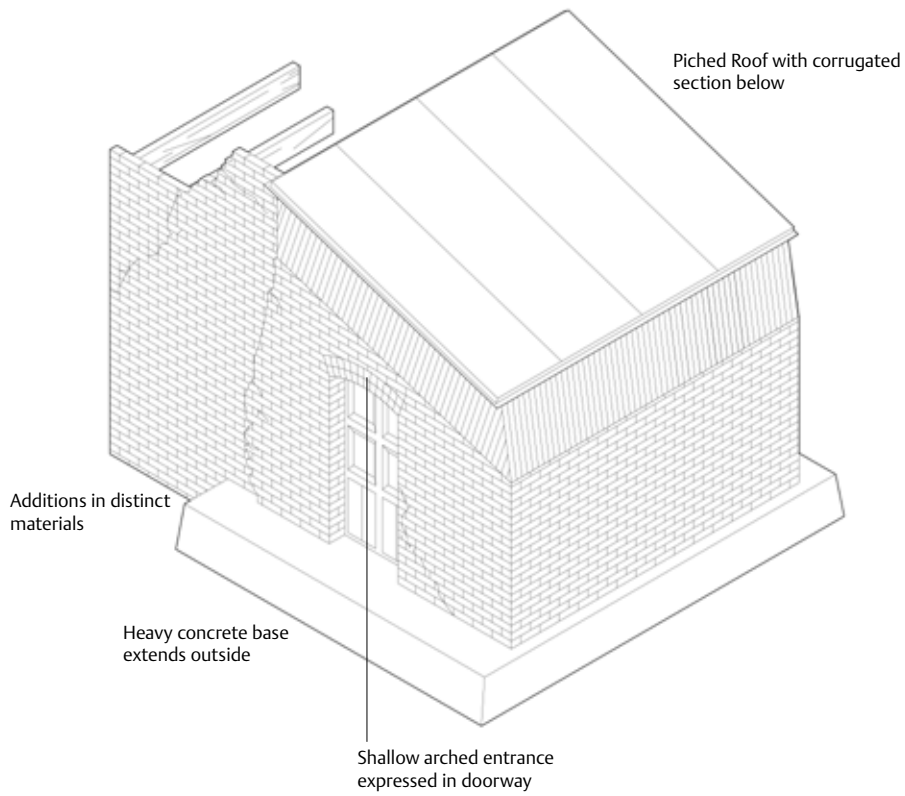
SMALL WELDED TANK

| | | |
|---|--|-----------------------------------|
| BUILT : Unknown, 20th century | USE : Assumed storage of water | SOURCE: Historic Photos |
|---|--|-----------------------------------|

Marshgate Mills was used for a variety of different industries including:
 Rope Works
 Battery Accumulators
 Chocolate
 Salmon Smokers
 Laundry and Sack factory

LIKELY LOCATION:
 Marshgate Mills /
 City Mill River





Details

Weight and mechanical purpose finds expression in thick base, spilling into the public space

Delicate door arch contrasts with simple materials



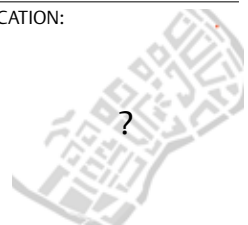
UNIDENTIFIED OUTBUILDING

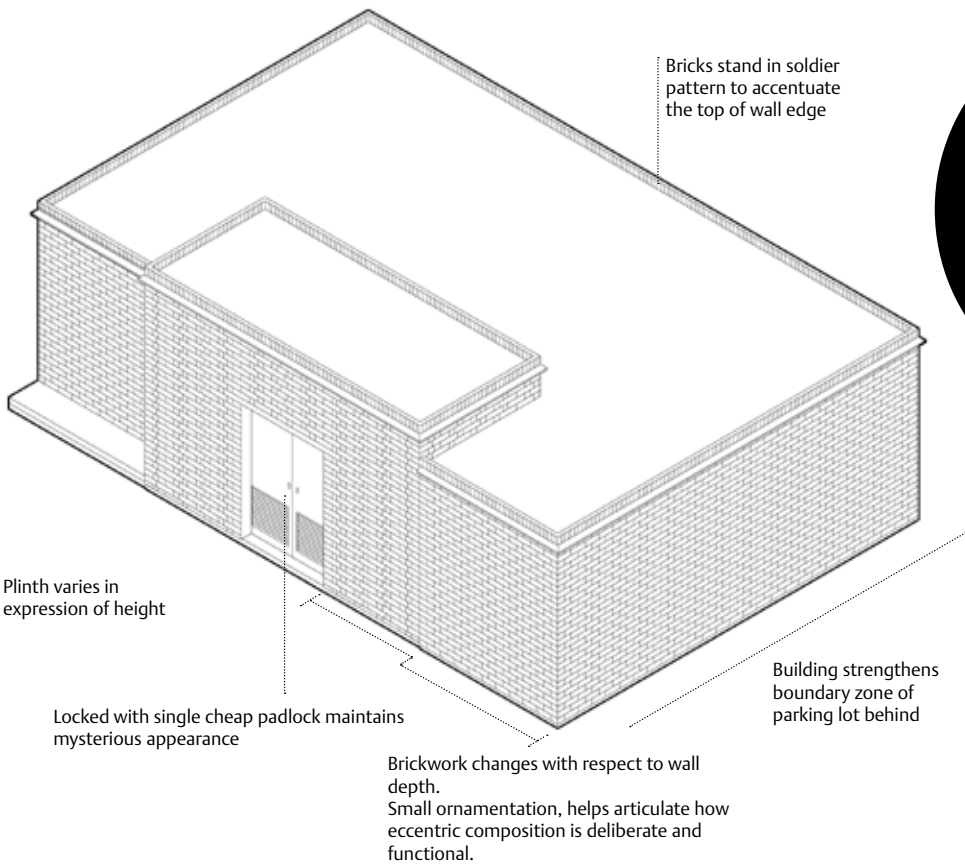
| | | |
|---|-------------------------|-----------------------------------|
| BUILT : Unknown, 20th century | USE : Unknown | SOURCE: Historic Photos |
|---|-------------------------|-----------------------------------|

Ad-hoc side extension to larger structure. Added in different brickwork with a lean-to roof that may have been extended upwards.

Heavy concrete base implies loading requirements or flood protection level.

LIKELY LOCATION:
Unknown





Details

Small units and pieces alongside larger buildings

Use of brick combines delicate ornamentation and details with functionality



OUTBUILDING

| | | |
|---------------------------------|--|--|
| BUILT : 1980s-present | USE : Previous substation or other use | SOURCE: Historic Photographs |
|---------------------------------|--|--|

Small building on Cooks Road, that may be electrical sub-station necessary to supply power to the industry, or alternative utility use.

Absence of signage suggests not in current use.

LIKELY LOCATION:
Cooks Road



Materials

Simple functional combinations of frame, layering and infill.

Material combinations in similar tone but to reflect mechanical function



The addition of post-construction gutter supports reinforces the idea of an architecture of additive components

Gradients of opacity tell of the age and cleanliness of the windows at both the moment of bricklaying and the time since

The builder's solution suggests complex patterns of tenant lease and freehold adaptations, where reversible modifications take precedent over the outward appearance.



BRICKED-UP WINDOW

BUILT :
1960s-present

USE :
Paradoxical

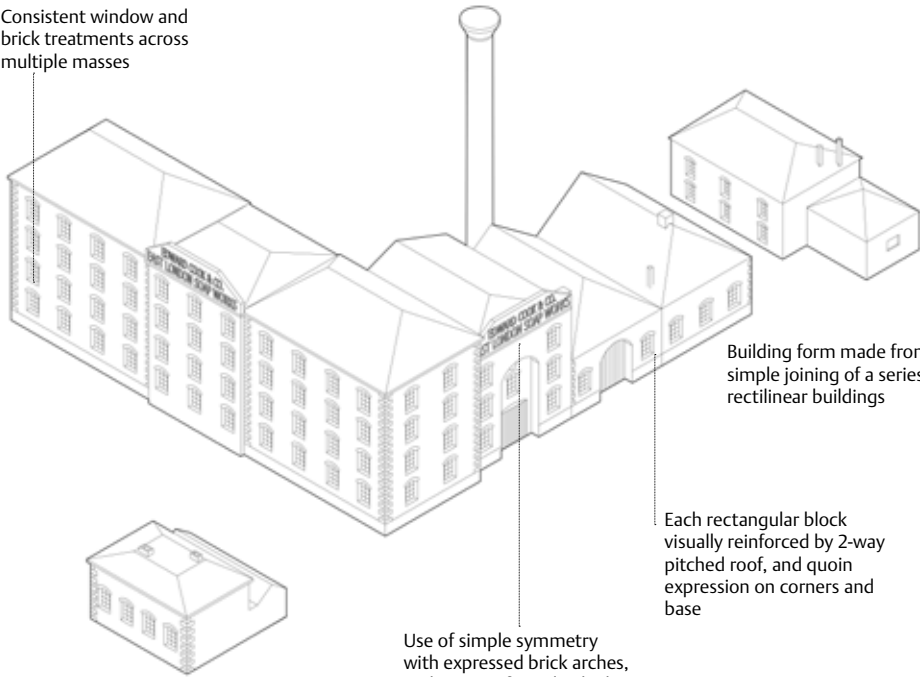
SOURCE:
Current

The addition of brick to obscure the rear of the window suggests both a change in program and an approach of adaptation over reconstruction, no matter the aesthetic cost.

LIKELY LOCATION:
Marshgate Business Centre



Consistent window and brick treatments across multiple masses

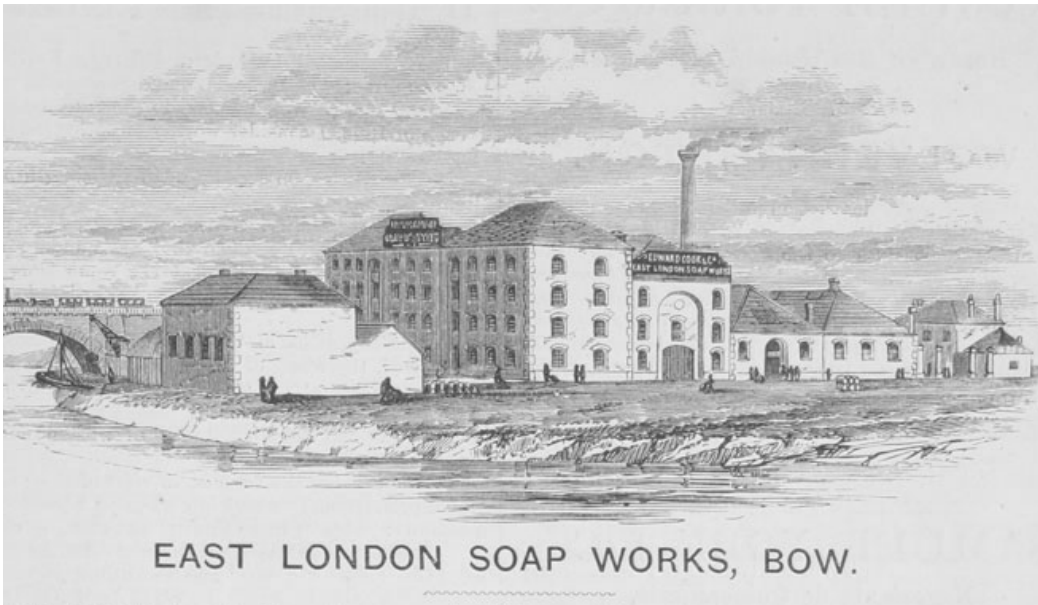


Building form made from the simple joining of a series of rectilinear buildings

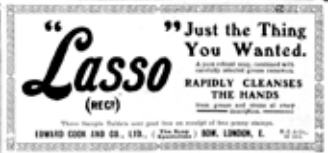
Each rectangular block visually reinforced by 2-way pitched roof, and quoin expression on corners and base

Use of simple symmetry with expressed brick arches, and signage for individual component blocks. These articulate different functions within the overall joined mass

Massing
 Large volumes formed by sequences of adjoining rectilinear volumes. The simplicity of each component is reinforced through its ornamental symmetry, fenestration, arches and roof pitch.



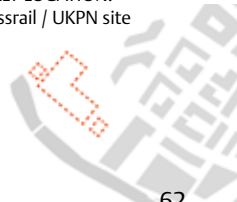
EAST LONDON SOAP WORKS, BOW.

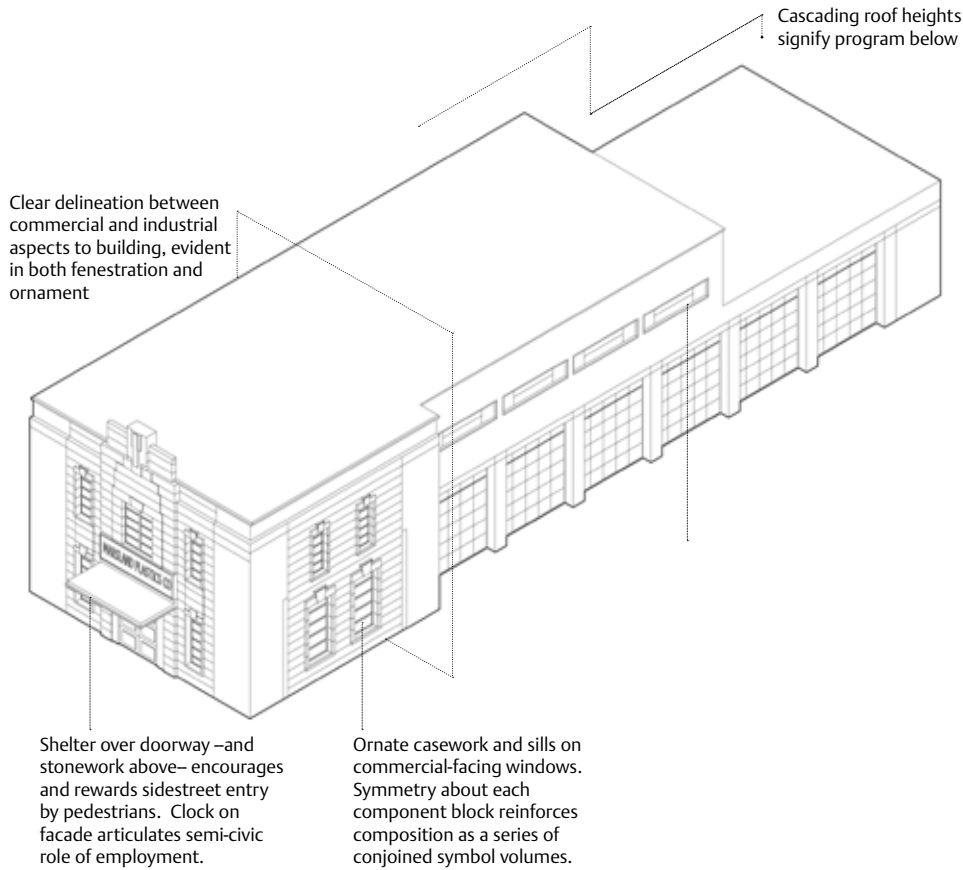


| | | |
|-------------------------|---------------------------------|---|
| BUILT : 1859- | USE : Soap production | SOURCE: Historic Advertisements |
|-------------------------|---------------------------------|---|

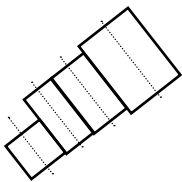
The soap works were established adjacent to the rail line as a series of 2-4 storey buildings, as one of the earliest occupants of Pudding Mill. The road built to connect it back to Stratford High Street became Cooks Road.

LIKELY LOCATION:
 Crossrail / UKPN site





Massing
 Large volumes formed by sequences of adjoining rectilinear volumes. The simplicity of each component is reinforced through its ornamental symmetry, fenestration, arches and roof pitch.



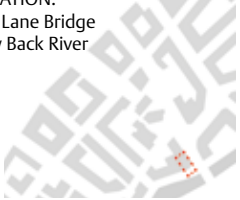
Riverfront boundaries relate to composition of symmetrical and civic scaled entrance

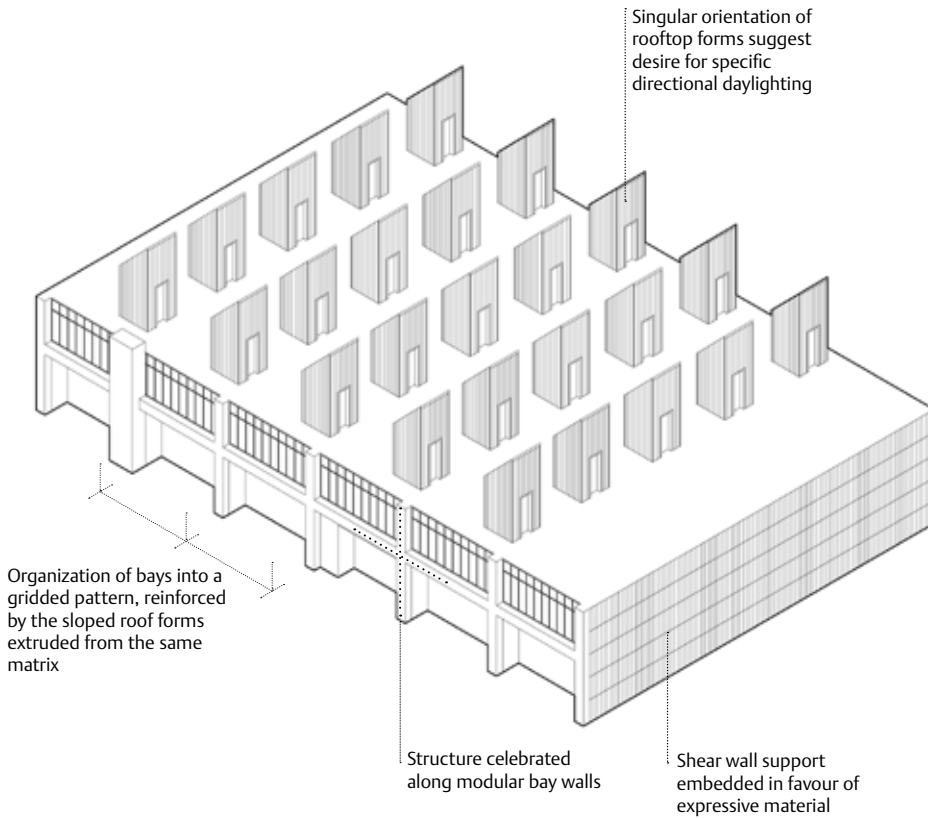
MARYLAND PLASTICS LTD.

| | | |
|--------------------|----------------------------|------------------------------|
| BUILT : 1960s-2006 | USE : Warehouse and office | SOURCE: Historic Photographs |
|--------------------|----------------------------|------------------------------|

Small, independent firms designed buildings along the Bow Back River for its access to road and waterways. These thoroughfares allowed companies like Maryland Plastics, Ltd. to easily acquire materials and distribute products. The building was demolished ahead of the 2012 London Olympic Games.

LIKELY LOCATION:
 Marshgate Lane Bridge
 Facing Bow Back River





Facade

Frame based buildings that establish a strong rhythm and allow for future adaptation



QUEEN MARY NUCLEONIC LABORATORY

BUILT :
1967-1984

USE :
Studies in nuclear energy

SOURCE:
Historic Photographs

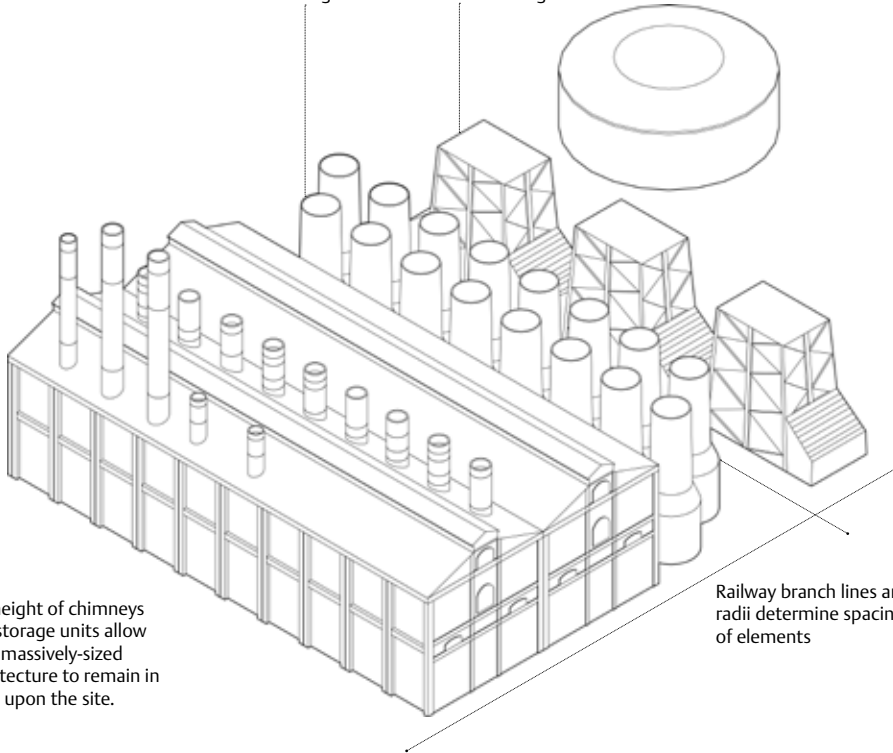
The University of London commissioned a nuclear research laboratory for students to be able to experiment with control rod calibration and core control, as well as research possibilities for nuclear energy.

LIKELY LOCATION:
Marshgate Lane



Pudding Mill River was solely used as cooling water feed. This was then evaporated within the cooling towers.

16 steel cooling towers 3 timber cooling towers.



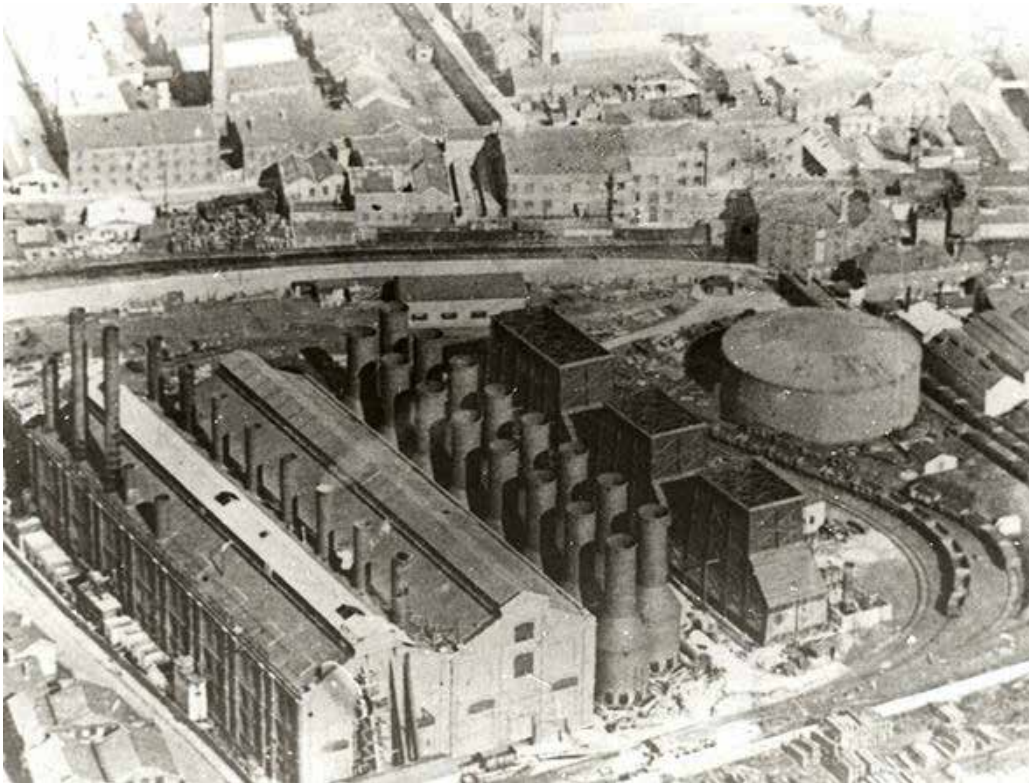
Tall height of chimneys and storage units allow for a massively-sized architecture to remain in scale upon the site.

Railway branch lines and radii determine spacing of elements

Facade

Ordered and tidy approach to site that looks relatively compact within city

Strong reflection of civic importance of industry through use of high quality and fine materials



External materials a direct reflection of function, ie a resistance to combustion, but Italian workers reportedly helped construct the turbine hall buildings and switch galleries, providing ornate brickwork arches, wrought iron handrails and terrazzo marble floors.

BOW POWER STATION

| | | |
|-----------------------------|------------------------------------|---|
| BUILT : 1902-1968 | USE : Coal Power Station | SOURCE: Historic Aerial Photographs |
|-----------------------------|------------------------------------|---|

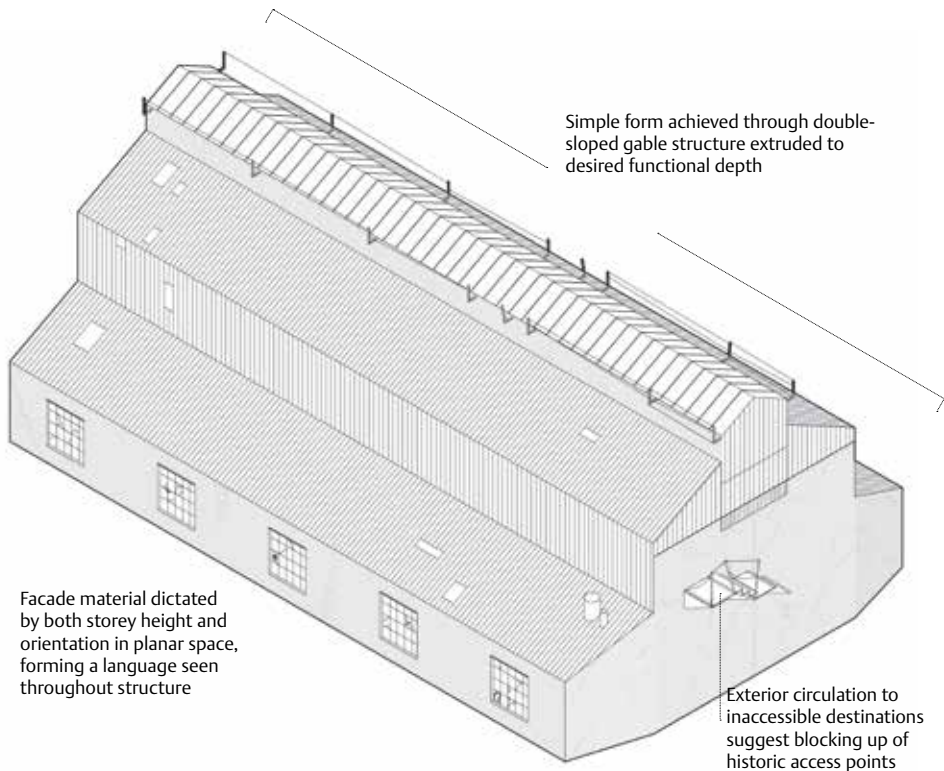
The 7 Acre Brick Field site in the centre of Pudding Mill Area was acquired by the Charing Cross and Strand Electricity Supply Company (CCSE) in 1902 using new parliamentary powers to build a new Bow Power Station. It was connected to six substations running from Fenchurch Street to St Martins in the Lane in the West End of

London. It was provided with its own railway siding connecting with the GER rail line to the north to bring coal by rail to the site. The power station was designed by William H Patchell as the first UK facility to supply three phase power on an AC basis with transmission at 11,000V.

At the time of decommissioning in 1968 the plant operated at 48MW.

LIKELY LOCATION:
LCS Site, former brick field





Materials

Simple building form with ordered fenestration.

Range of materials vary by mechanical function providing articulation to the overall mass, but keeping a coherent tone



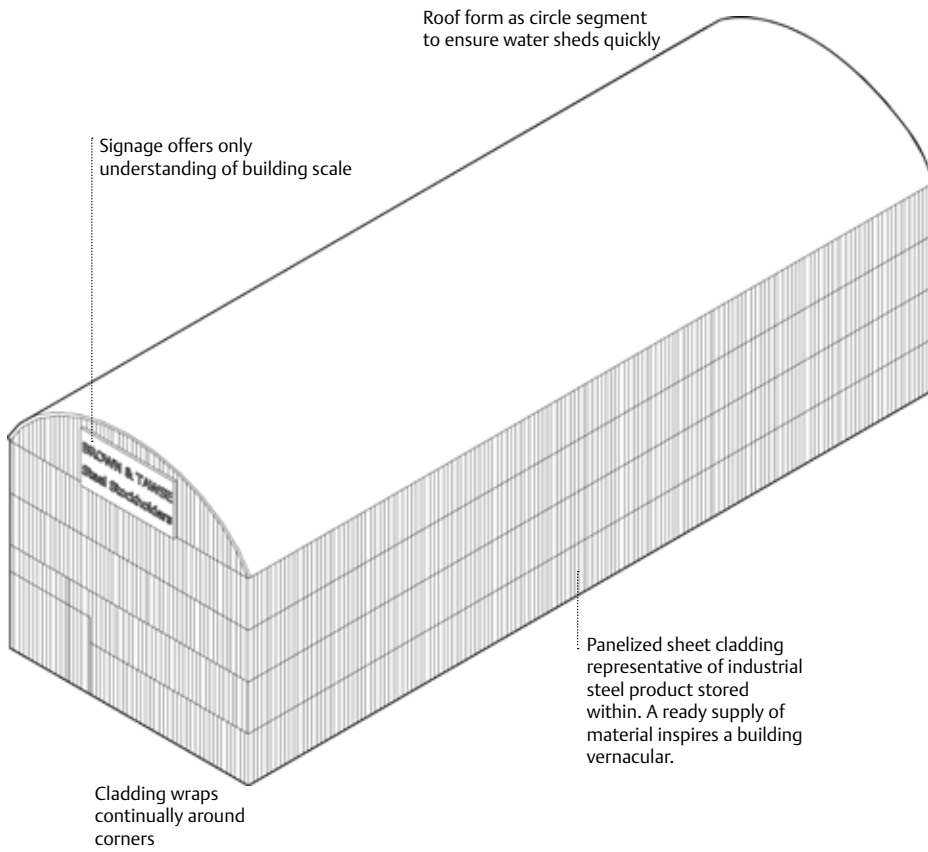
INDUSTRIAL WAREHOUSE

| | | |
|-------------------------|-------------------------|--|
| BUILT : 1980s | USE : Unknown | SOURCE: Historic Photographs |
|-------------------------|-------------------------|--|

Pudding Mill and Marshgate Lane have traditionally served as host to a variety of heavy industry. The influx of product, stock, and raw material goods requires large storage facilities like the one pictured above.

LIKELY LOCATION:
Marshgate Mills tbc





Intricacy

Simple building form.

Metal cladding provides an informal and fine patternation whilst maintaining a coherent tone



BROWN & TAWSE STEEL STOCKHOLDERS

| | | |
|------------------------------------|---------------------------------------|--|
| BUILT : Mid-20th century | USE : Steel product storage | SOURCE: Historic Photographs |
|------------------------------------|---------------------------------------|--|

As no steel has been manufactured on this site, the Brown & Tawse warehouse was most likely filled with steel goods produced at a factory at another location and shipped here for storage.

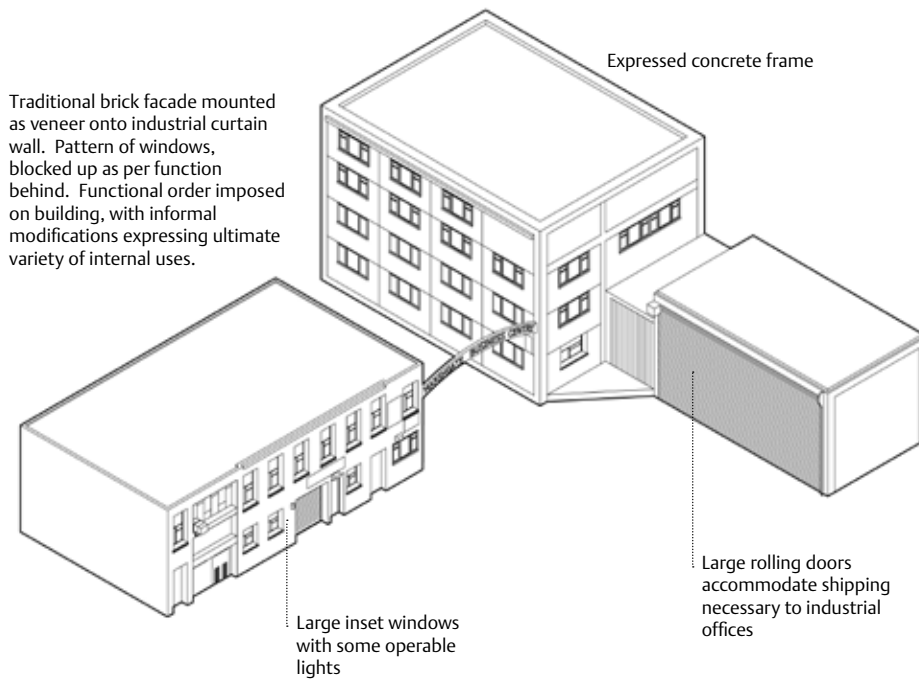
LIKELY LOCATION:
TBC



Massing

Simple interconnected building volumes

Each volume shows a difference in frame and material cladding to emphasise symmetry of each unit



MARSHGATE BUSINESS CENTRE

BUILT :
1960s-present

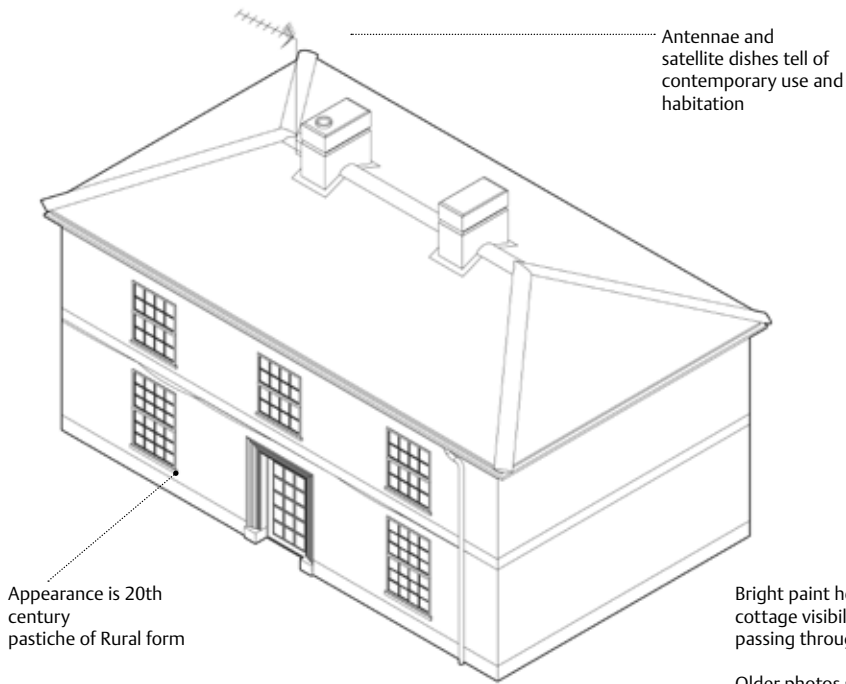
USE :
Office complex

SOURCE:
Historic Photographs

The business centre houses a variety of light industry and their corresponding office spaces. The building's tenants benefit from strong overland road connections and were recently used as planning offices for the 2012 London Olympic Games.

LIKELY LOCATION:
Marshgate Mills tbc





Waterfront
Engages with river edge

Simple volume visually and physically orientated to the canal edge presents a romantic vision of a building as small part of the landscape.

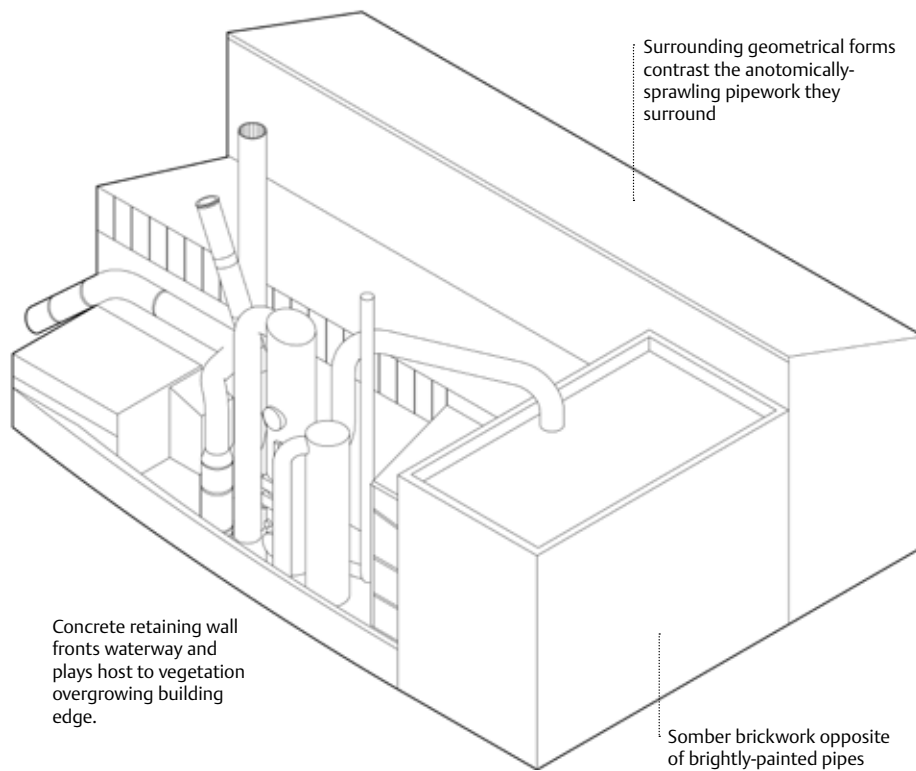


LOCK KEEPER'S COTTAGE

| | | |
|--------------------------------|----------------------------------|---------------------------|
| BUILT : 1935-present | USE : Employee Housing | SOURCE: Current |
|--------------------------------|----------------------------------|---------------------------|

The channel lock was created as part of the 1932 flood relief scheme. An artificial island was constructed to house a cottage for the supervision and attendance of the channel lock system by trained individuals.

LIKELY LOCATION:
Bow River Lock



Massing

Collection of simple volumes to form overall complex

Pushes up to river edge

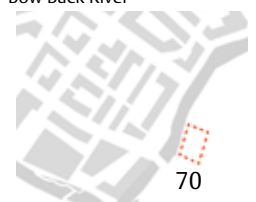


INDUSTRIAL FACILITY

| | | |
|-------------------------|-------------------------|--|
| BUILT : 1960s | USE : Unknown | SOURCE: Historic Photographs |
|-------------------------|-------------------------|--|

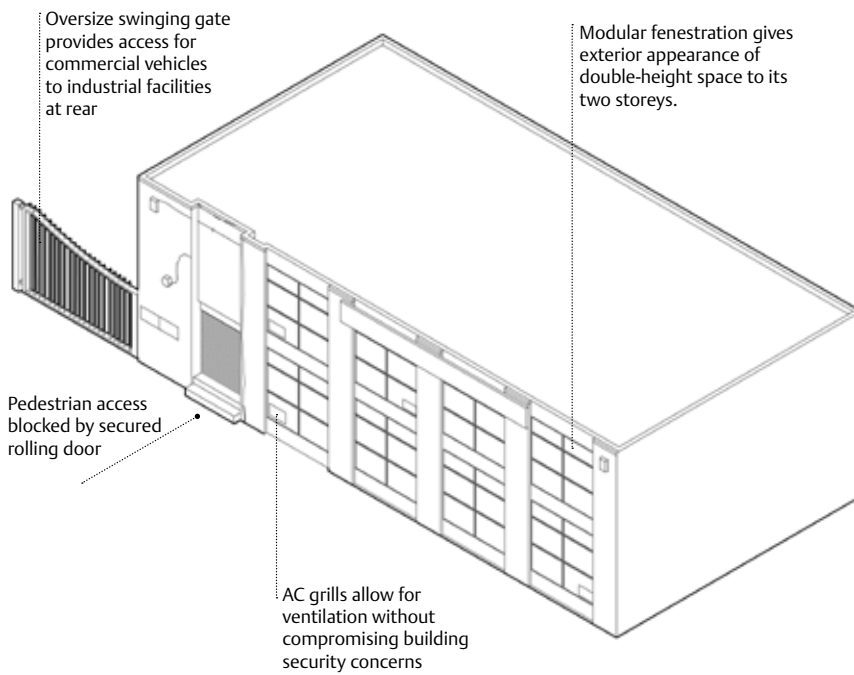
This small facility was potentially used for the cracking and distillation of oil-based commodities. The building and its pipework fell into disuse before being demolished to accommodate the flats now built on the site.

LIKELY LOCATION:
Bow Back River



Facade

Simple volume and consistent rhythm across facade



WANSTEAD WELDING WORKS

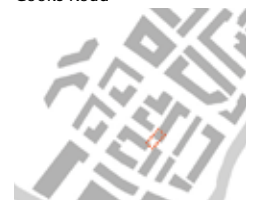
BUILT :
1963-present

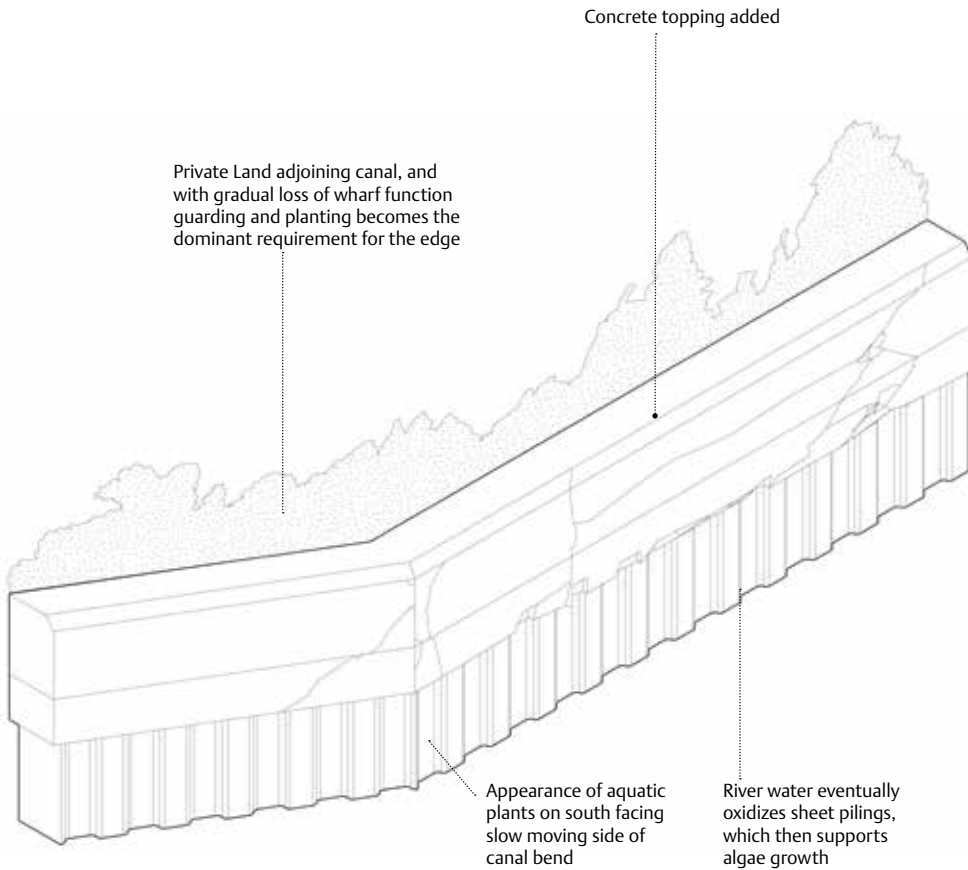
USE :
Ex-office and industrial
manufacture space.

SOURCE:
Current

Since the company's dissolution in 2013 the welding workshop has stood in derelict condition. Security seems to be in high priority, making extensive use of gates and doorways as a means to protect the disused building behind them.

LIKELY LOCATION:
Cooks Road





Soft greening of river edge



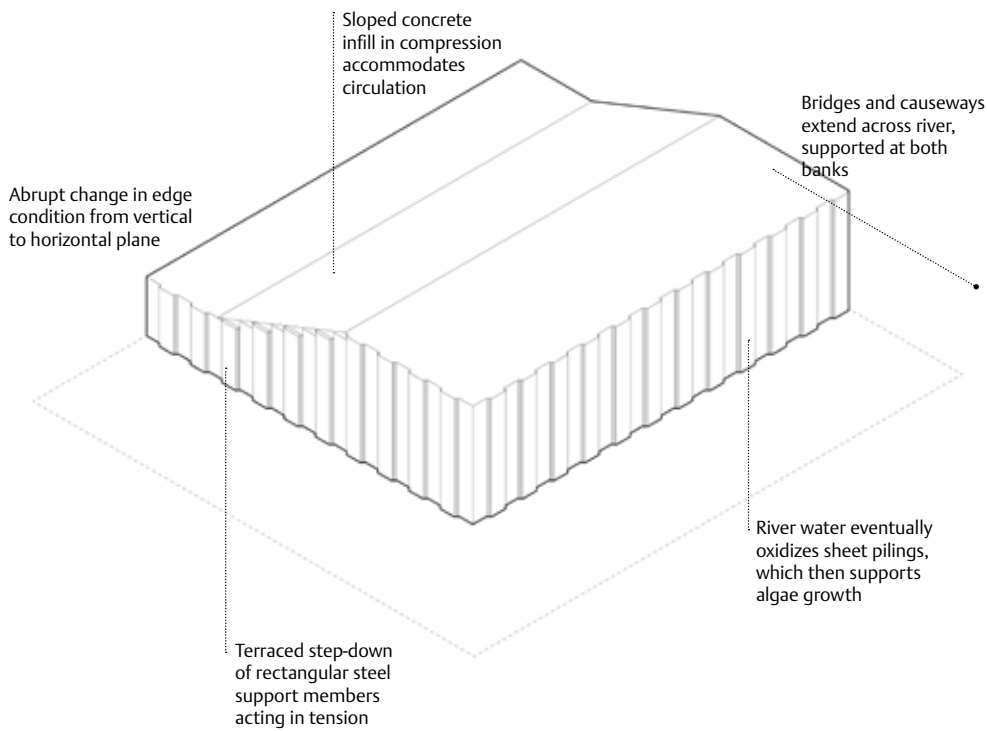
WATERWAY EDGE, CONDITION 1

| | | |
|---------------------------------|--------------------------------|---------------------------|
| BUILT : 1930s-present | USE : Retaining wall | SOURCE: Current |
|---------------------------------|--------------------------------|---------------------------|

As part of a flood-relief scheme, large sections of canal were extensively widened, rebuilt, or diverted. Uncapped steel piles measuring 5x12" were driven into the banks to improve stability of soft verges.

LIKELY LOCATION:
Marshgate Business Centre, City Mill River





Waterfront

Undulations in river edge height treated simply through connecting slopes and railing



WATERWAY EDGE, CONDITION 2

BUILT :
1930s-present

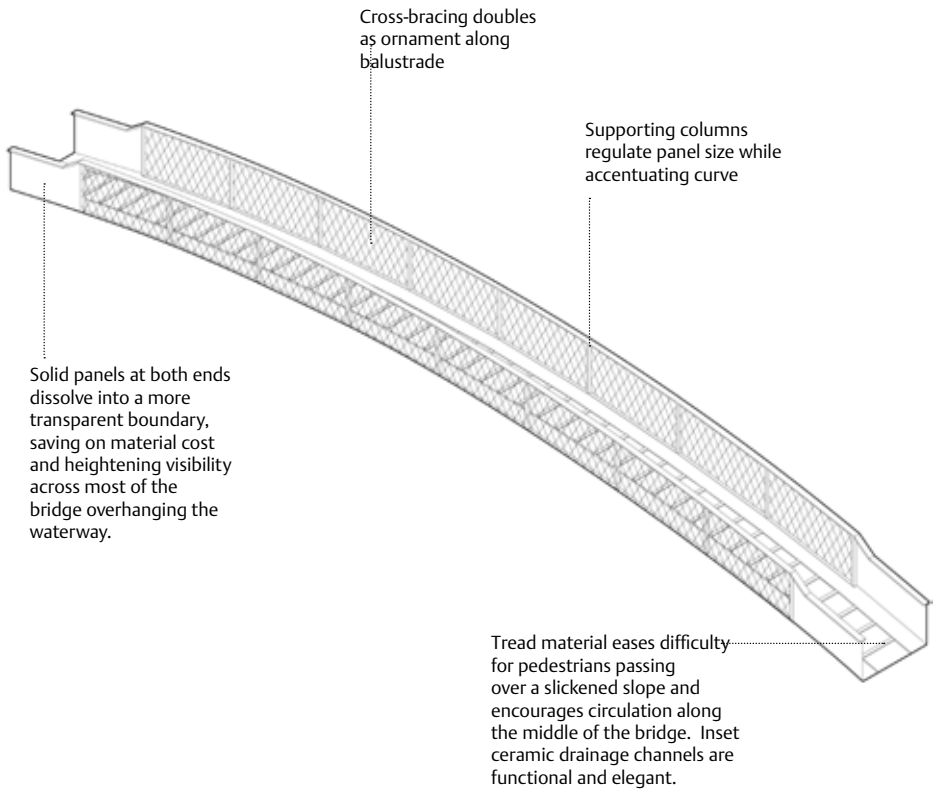
USE :
Retaining wall

SOURCE:
Historic Photographs

As part of a flood-relief scheme, large sections of canal were extensively widened, rebuilt, or diverted. Uncapped steel piles measuring 5x12" were driven into the banks to improve stability of soft verges.

LIKELY LOCATION:





Intricacy

Bridge rendered in simple form but with fine patternation

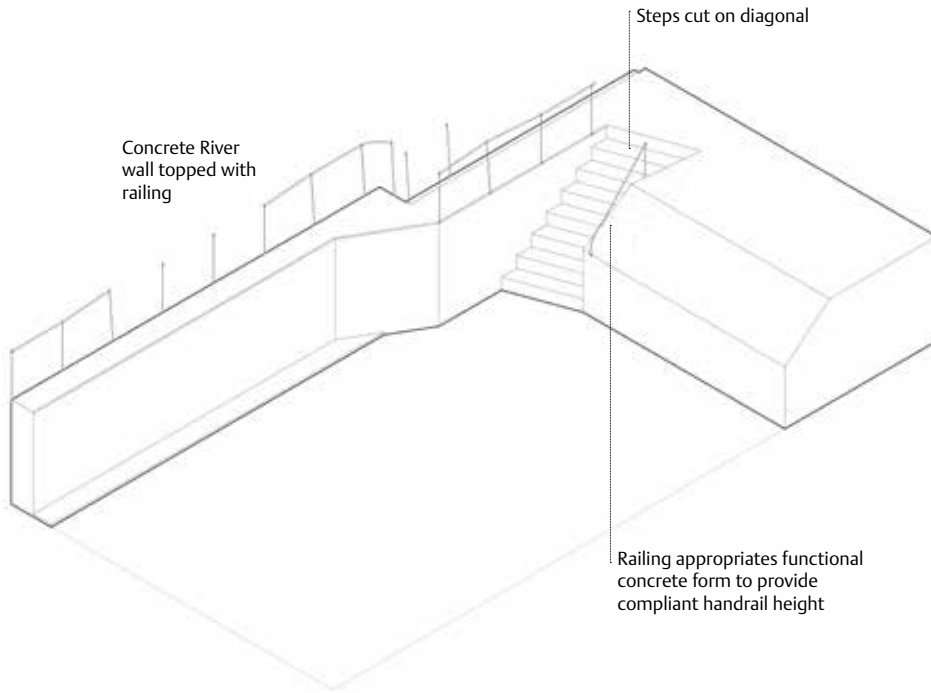


CAST IRON BRIDGE

BUILT : _____ USE : _____ SOURCE: _____
 Pedestrian access Historic Photographs

Having fallen into a state of dilapidation, the cast iron arch bridge was restored to its earlier condition as part of the area's overhaul ahead of the Olympic program. It remains in use in its traditional location.

LIKELY LOCATION:
 Marshgate Mills tbc



Waterfront

Eccentric diagonal cut of steps and wall generated by functional and connection of planes

RIVERSIDE STEPS

BUILT :
~1850s / 1932

USE :
Unknown

SOURCE:
Historic Photographs

City Mill River was canalised around the 1850s. Further works were undertaken to the Canals in the 1932 River Lea Flood relief scheme, when City Mill Locks were added and Bow Back Creek straightened.

LIKELY LOCATION:
City Mill River east bank



REFERENCES

Cycling Level of Service (CLoS) Standards

CLoS is based on the six design outcomes of safety, directness, coherence, comfort, attractiveness and adaptability, with performance measured against each factor.

Other Industrial Location (OIL)

This is located at Cook's Road as shown within the Local Plan Proposals Map. The Local Plan description for this area is as follows:

"Land within B1c/B2/B8 Use Classes. Land between Cooks Road and River Lea, redevelopment opportunity with a significant proportion of employment use providing floorspace within a range of use B1–B8 Uses Classes alongside other uses, with an element of residential, providing a transition to the lower employment mix of uses within the remainder of Pudding Mill."

Legacy Communities Scheme (LCS)

Permission for the long-term development of five neighbourhoods within Queen Elizabeth Olympic Park and nearby.

Application reference: 11/90621/OUTODA

PDZ 8

Planning Delivery Zone 8 of the Legacy Communities Scheme, covering parts of Pudding Mill and Bridgewater Road site.

Monday - Friday
9:00am - 5:00pm

For free translation summary call

Ücretsiz çeviri özeti için arayınız.

Για μια κλήση δωρεάν περίληψη μετάφρασης

للحصول على خلاصة مترجمة مجاناً اتصل بـ:

Để có bản dịch sơ lược miễn phí điện thoại

مفت ترجمے کے خلاصے کے لئے فون کریں

বিনাখরচে অনুবাদের সারসংক্ষেপের জন্য টেলিফোন করুন।

欲索取免費中文翻譯摘要，請致電

ટૂંકસાર કરેલું મફત ભાષાંતર મેળવવા માટે ફોન કરો

निःशुल्क अनुवाद सारांश के लिए कॉल करें

ਮੁਫਤ ਅਨੁਵਾਦ ਦਾ ਸਾਰ ਪ੍ਰਾਪਤ ਕਰਨ ਲਈ ਕਾਲ ਕਰੋ

Also for Audio, Large Print and Braille, phone

0800 952 0119

© The Language Shop

Visit the Legacy Corporation website at <http://queenelizabetholympicpark.co.uk>

Or contact the Planning Policy and Decisions team on:

Telephone 020 3288 1800 Email planningpolicy@londonlegacy.co.uk

In writing Planning Policy and Decisions Team, London Legacy Development Corporation,
Level 10, 1 Stratford Place, Montfichet Road, London, E20 1EJ