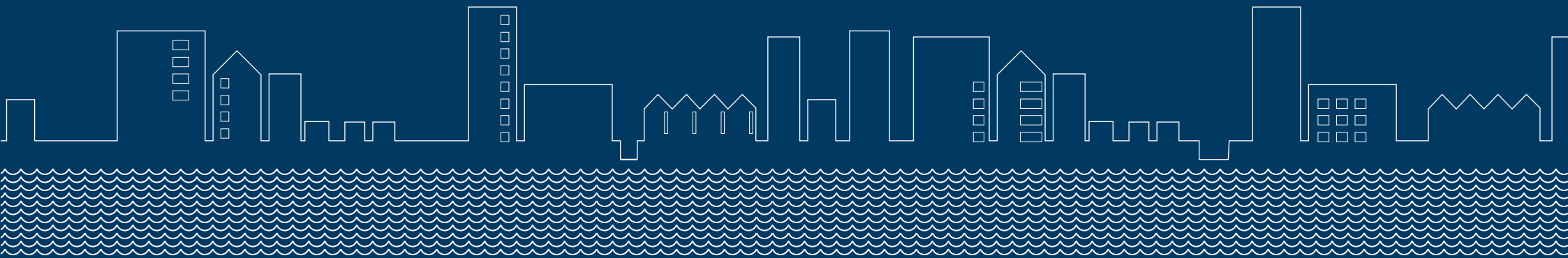


Royal Docks

Local Transport Design Guidance

Issue 01 - 2015



MAYOR OF LONDON





CONTENTS

1.0 INTRODUCTION

- 1.1 BACKGROUND
- 1.2 SCOPE
- 1.3 STATUS

2.0 REGENERATING THE DOCKS

- 2.1 SUPPORTING GROWTH
- 2.2 RIVER CROSSINGS
- 2.3 TRANSPORT IMPLEMENTATION STRATEGY
- 2.4 ROYAL DOCKS-WIDE DLR INFRASTRUCTURE
- 2.5 CUSTOM HOUSE GATEWAY
- 2.6 HIGHWAYS NETWORK
- 2.7 IMPROVING LOCAL CONNECTIONS

3.0 ROADS TASK FORCE STREET TYPES

- 3.1 STREET TYPES FOR LONDON
- 3.2 MAPPING STREET TYPES IN THE ROYAL DOCKS
- 3.3 CORE ROADS
- 3.4 HIGH ROADS
- 3.5 CONNECTORS
- 3.6 HIGH STREETS
- 3.7 CITY STREETS
- 3.8 LOCAL STREETS
- 3.9 TOWN SQUARES

4.0 CYCLING

- 4.1 STREETS FOR CYCLING
- 4.2 CYCLING LEVELS OF SERVICE
- 4.3 CYCLING PROVISION IN NEW DEVELOPMENTS
- 4.4 FULL SEPARATION
- 4.5 DEDICATED CYCLE LANES
- 4.6 SHARED LANES
- 4.7 INTEGRATION

5.0 PUBLIC TRANSPORT

- 5.1 DLR STATIONS AND VIADUCTS
- 5.2 CROSSRAIL
- 5.3 BUS INFRASTRUCTURE

6.0 WATERWAYS

- 6.1 DOCK AND RIVER EDGES
- 6.2 PEDESTRIAN AND CYCLE ACCESS
- 6.3 ACTIVITY AND ANIMATION
- 6.4 CROSS-WATER CONNECTIONS
- 6.5 DOCK EDGE/RIVER WALL

7.0 STREETScape MATERIALS

- 7.1 MATERIALS GUIDANCE
- 7.2 CONTINUITY BETWEEN EXISTING AND NEW
- 7.3 BACKGROUND NOT FOREGROUND
- 7.4 QUALITY AND USE OVER APPEARANCE
- 7.5 WHOLE LIFE ENVIRONMENTAL IMPACT
- 7.6 ADOPTION AND MAINTENANCE
- 7.7 STANDARD DETAILS
- 7.8 MATERIALS PALETTE

8.0 STREET FURNITURE AND ELEMENTS

- 8.1 STREETScape ZONES
- 8.2 STREET FURNITURE
- 8.3 LANDSCAPE
- 8.4 LIGHTING
- 8.5 PARKING AND SERVICING
- 8.6 BOUNDARY TREATMENT



1.0 INTRODUCTION

1.1 BACKGROUND

The Royal Docks is one of London's most significant Opportunity Areas, situated in the 'Arc of Opportunity' that runs from Stratford through the Lower Lea Valley to the Thames. Strategic investment in this region has already brought forward transformational change at Stratford and the Olympic Park and more recently we have seen an increase in the rate of new development applications and construction activity further south around the Royal Docks and Canning Town.

The Mayor's Vision for the Royal Docks (2011) describes the growth of a world-class business centre, complemented by new homes, jobs, infrastructure and leisure facilities, making the Docks a vibrant and revitalised part of London's future. There have been attempts to regenerate this area in the past, with sustained investment in transport infrastructure and a number of pioneering developments such as ExCeL, the Siemens Pavilion and the University of East London (UEL) Campus. While these developments have begun to repopulate the eastern and western edges of the Opportunity Area, they still suffer from some degree of isolation, linked by strategic infrastructure corridors but lacking integration at a local level.

Given the scale of the Opportunity Area (more than 1,000 hectares) good local connectivity will be vital to the success of development and investment in the Docks.

1.2 SCOPE

We have developed this guidance together with the Greater London Authority (GLA) and London Borough of Newham (LBN). It outlines our shared objectives for local transport in the Royal Docks, promoting good design through the upgrade of existing streets and delivery of new connections, to ensure that they:

- Perform better for all users, in particular cyclists and pedestrians, meeting the changing demands on local transport in the area
- Provide a better balance between movement and place functions
- Become the foreground for daily life and the focus for social and economic activity

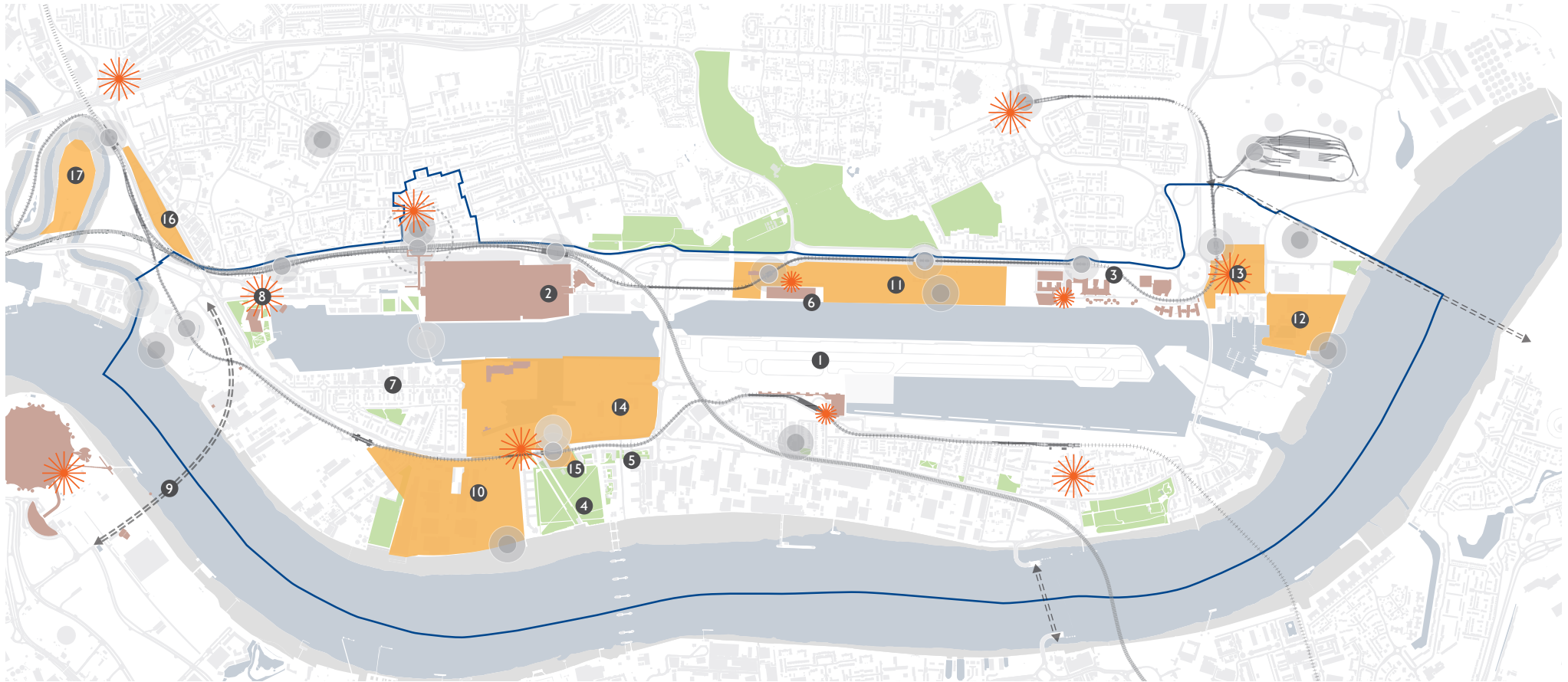
This guidance can be applied to all publicly accessible routes in the Royal Docks to ensure a consistent approach to streetscape and character as streets are upgraded and new connections created. Our approach is based on the Mayor's Roads Task Force (RTF) Vision for how London's streets and spaces should be planned, managed and developed in the short, medium and long term. It should be used by stakeholders as a reference when considering the role of local transport across the area as it changes in character from industrial led activity to a residential and commercial focus.



1.3 STATUS

The Local Transport Design Guidance provides an initial point of reference for all those who are involved in shaping the street environment in the Royal Docks. Stakeholders will be directed to this as a precursor to more formal engagement with the authorities through project development or pre-application discussions. It should be read alongside the following documents:

- Royal Docks Vision, 2011
- Royal Docks Spatial Principles, 2011
- Royal Docks Parameters for Development, 2011
- Roads Task Force – The Vision and Direction for London's Streets, 2013
- London Plan – Further Alterations, 2015
- London Borough of Newham Core Strategy, 2012
- Mayor's Transport Strategy, 2010
- Royal Docks Infrastructure Study, Strategic Transport Study, 2011
- Royal Docks Public Realm Materials and Elements Palette, 2011



Royal Docks - emerging places

- Pioneering developments
- Development sites
- Emerging places
- Study area boundary

Pioneering developments in the Royal Docks

1. London City Airport
2. ExCeL estate
3. University of East London
4. Thames Barrier Park
5. Barrier Park East/Waterside Park
6. Newham Dockside
7. Britannia Village
8. Siemens Crystal
9. Emirates Air Line

Emerging development sites

10. Royal Wharf
11. ABP - Approved subject to legal agreements (Hybrid)
12. Great Eastern Quays - Consented (Full)
13. Gallions Quarter - Approved subject to S106 (Hybrid)
14. Silvertown Quays - Approved (Outline) subject to S106 and referral to GLA
15. Pontoon Dock car park
16. Silvertown Way
17. Leamouth Peninsula

2.0 REGENERATING THE DOCKS

2.1 SUPPORTING GROWTH

Increasing developer interest in the Royal Docks means that the estimated growth potential is now significantly higher than previous figures suggested. This has triggered a review of the impacts of background growth and the proposed additional development to make sure that the transport network can support it.

2.2 RIVER CROSSINGS

As part of a more strategic view of transport in London we are looking at options for new river crossings to improve north-south connections in the area around the Royal Docks.

Silvertown Tunnel

A potential new road tunnel between Silvertown and north Greenwich would relieve congestion at the Blackwall Tunnel by providing an alternative river crossing.

East of Silvertown

Options are being considered for upgrades to the Woolwich Ferry or its replacement with a new cross-river connection further eastwards at Gallions Reach or Belvedere.

2.3 TRANSPORT IMPLEMENTATION STRATEGY

We have developed a Transport Implementation Strategy, outlining the strategic and local infrastructure needed to support the estimated growth in the Royal Docks going forward. Clear short to medium-term priorities have been identified, including:

- Royal Docks-wide DLR infrastructure
- Custom House gateway
- Highways network
- Local connections

Transport initiatives will focus on improving journey times for strategic travel, while promoting public transport, walking and cycling for local journeys.

Increasing cycling and walking is a priority for us. This could not only improve the physical environment and accessibility, but also improve public health by encouraging people to lead more active lifestyles.

2.4 ROYAL DOCKS-WIDE DLR INFRASTRUCTURE

Significant investment in DLR services is required to cater for the growth in demand resulting from new development. This will include:

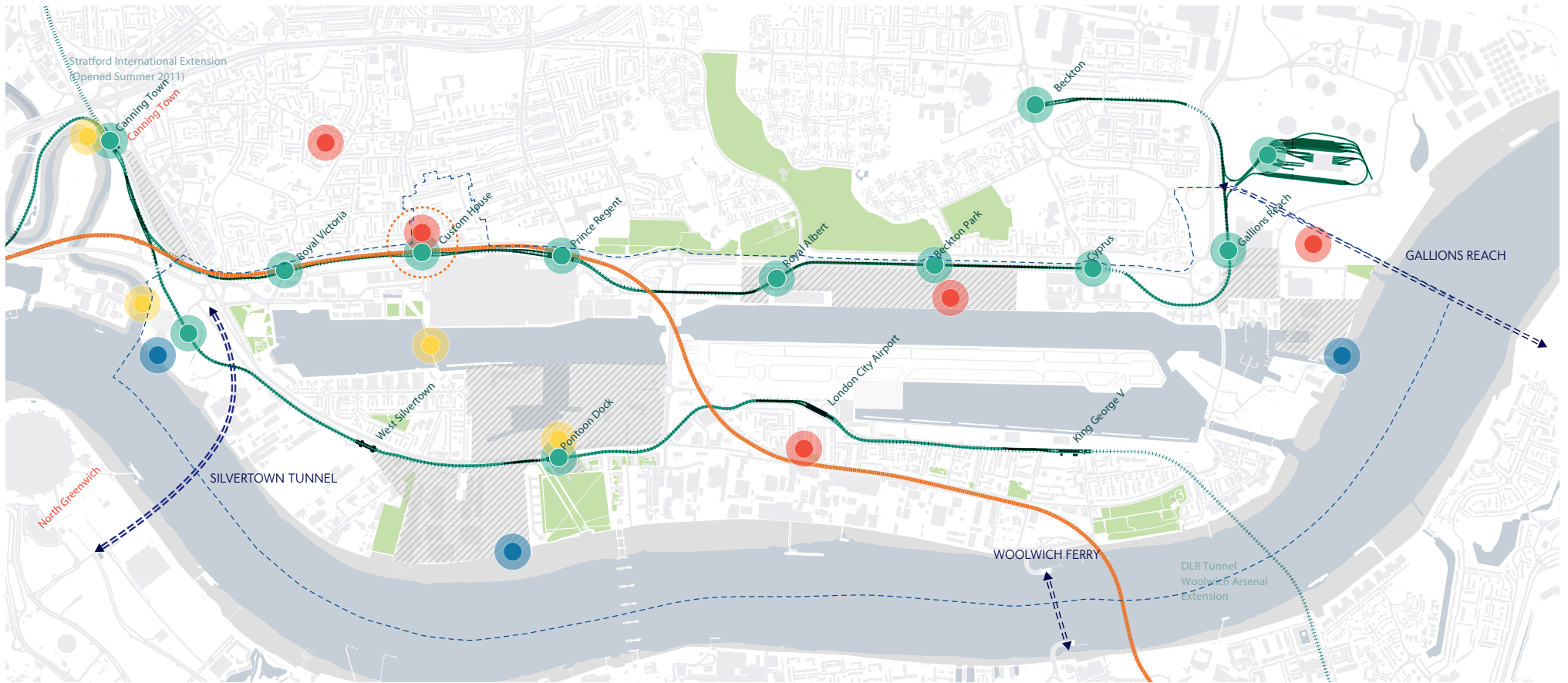
- Increased DLR frequency and capacity through additional rail-cars
- Comprehensive upgrade of Royal Albert station and additional works to increase capacity at Beckton Park and Canning Town
- Improved access to platforms at Pontoon Dock station through new escalators or lifts and improvements to the concourse of the station, together with the development of a bridge link between Silvertown Quays and the station

Further capacity enhancements will be required as new housing is delivered, such as at Gallions Reach which will support development at Gallions Quarter and Great Eastern Quays. In the longer term there will be a need to refurbish and renew the remaining stations on the Beckton Branch of DLR.

2.5 CUSTOM HOUSE GATEWAY

The new Crossrail station at Custom House will significantly improve connections to Central London. This will be an important gateway to the Royal Docks, requiring additional infrastructure to enable this to become a world-class interchange including:

- Improvements to the DLR station capacity and interface with Crossrail in order for the station to operate safely
- Improvements to the station environment (associated with DLR) including enhanced urban realm around the interchange
- Additional bus standing and stopping space located close to station entrances
- Improvements to local connections around and to the interchange



Proposed transport improvements in the Royal Docks

- DLR infrastructure
- Crossrail
- Bus infrastructure and services
- Improvements to local connectivity
- Custom House interchange
- River services infrastructure
- Potential new / improved river crossings
- Study area boundary

2.6 HIGHWAYS NETWORK

The primary movement network is largely defined by a circuit of routes crossing the area in a figure of eight. As new developments are built these routes will stitch emerging and existing neighbourhoods together. The large industrial sites which characterise much of the Opportunity Area are largely impenetrable, limiting local connections to the established neighbourhoods at North Woolwich and Britannia Village.

The main challenges associated with these existing routes are set out below.

2.6.1 WIDE STREETS

The primary streets were designed to carry high volumes of traffic, much of this freight, rapidly through the area. These wide carriageways make it difficult for pedestrians to cross and create a poor environment for walking and cycling.

2.6.2 SEVERANCE

The network of local streets and connections is not continuous, creating dead ends and limiting opportunities for linking existing and emerging developments.

2.6.3 LEGIBILITY

The primary routes lack a consistent character, forming weak connections rather than strong corridors of activity. The use of signage and materials within the public realm is inconsistent, and there are a number of challenging edge conditions which further degrade the pedestrian experience.

2.6.4 SAFETY AND SECURITY

The perception of safety in the public realm is poor. Street lighting is inconsistent and pedestrian routes are obscured from the street by planting in some places. Unused space beneath the DLR viaducts and service routes around major destinations such as ExCeL and London City Airport further contribute to a poor quality pedestrian experience.

2.6.5 URBAN COMFORT

There is limited mitigation within the urban realm for the windswept conditions around the Dock edges and the River.

Targeted investment in the highways network will help to deliver a greater quality streetscape environment. Improvements to the performance of these existing routes, alongside the delivery of well integrated local connections, will create a more accessible and cohesive urban area and encourage walking and cycling for local journeys.



A



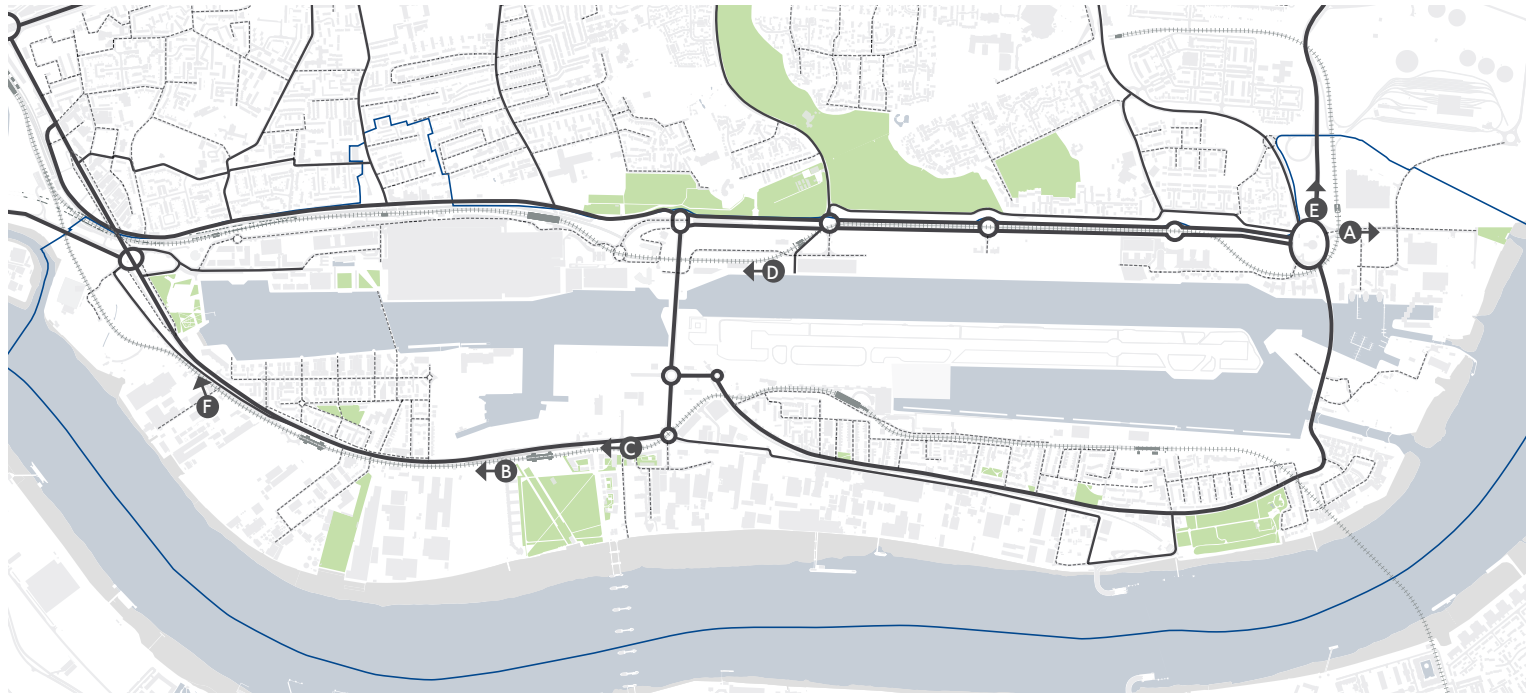
B



C



D



- Existing street network
- Primary routes
- - - Local connections
- - - Study area boundary



E



F



2.7 IMPROVING LOCAL CONNECTIONS

Improving local connectivity in the Royal Docks will require investment in the existing network of streets and spaces as well as the creation of high-quality new connections. These improvements will be delivered through a combination of private development and public investment.

Main principles for improving local connections include:

Upgrading - Investing in the existing network to make streets in the Docks more liveable and consequently more attractive for walking and cycling

Connecting – Ensuring there are high-quality connections into the Royal Docks from across Newham and neighbouring boroughs, improving access to emerging employment opportunities and providing links to the waterfront for recreation and leisure

Bridging – Overcoming barriers to pedestrian and cycle movement by identifying opportunities to bridge across the waterways and major lines of infrastructure

Stitching - Upgrading connections between existing and emerging neighbourhoods in the Docks. Improving access to local jobs, services and shared amenities

Network of spaces - Creating a sequence of connected parks and green spaces throughout the Docks. Improving awareness and access to these destinations for residents and visitors

2.7.1 AREAS OF FOCUS

Some of the identified areas of focus for local connections include:

2.7.2 LOWER LEA

Investment in the first phase of the Leaway, providing a continuous pedestrian and cycle link along the River Lea from the Thames, through the Royal Docks up to Queen Elizabeth Olympic Park. Improving connections westwards into Tower Hamlets to provide access to jobs and services in Canary Wharf and the Isle of Dogs.

2.7.3 CUSTOM HOUSE

Improving access to Custom House Interchange which is set to become a major transport hub for the borough, linking the established and emerging areas in the north to the economic, social and cultural opportunities to be delivered by the regeneration of the Docks. For onward travel into central London or the wider region, pedestrians and cyclists will be able to interchange seamlessly with Crossrail and the DLR. Access from the north and south will be dependent on negotiating major barriers such as the Dock itself and the A13 and rail lines to the north.

2.7.4 NORTH WOOLWICH ROAD

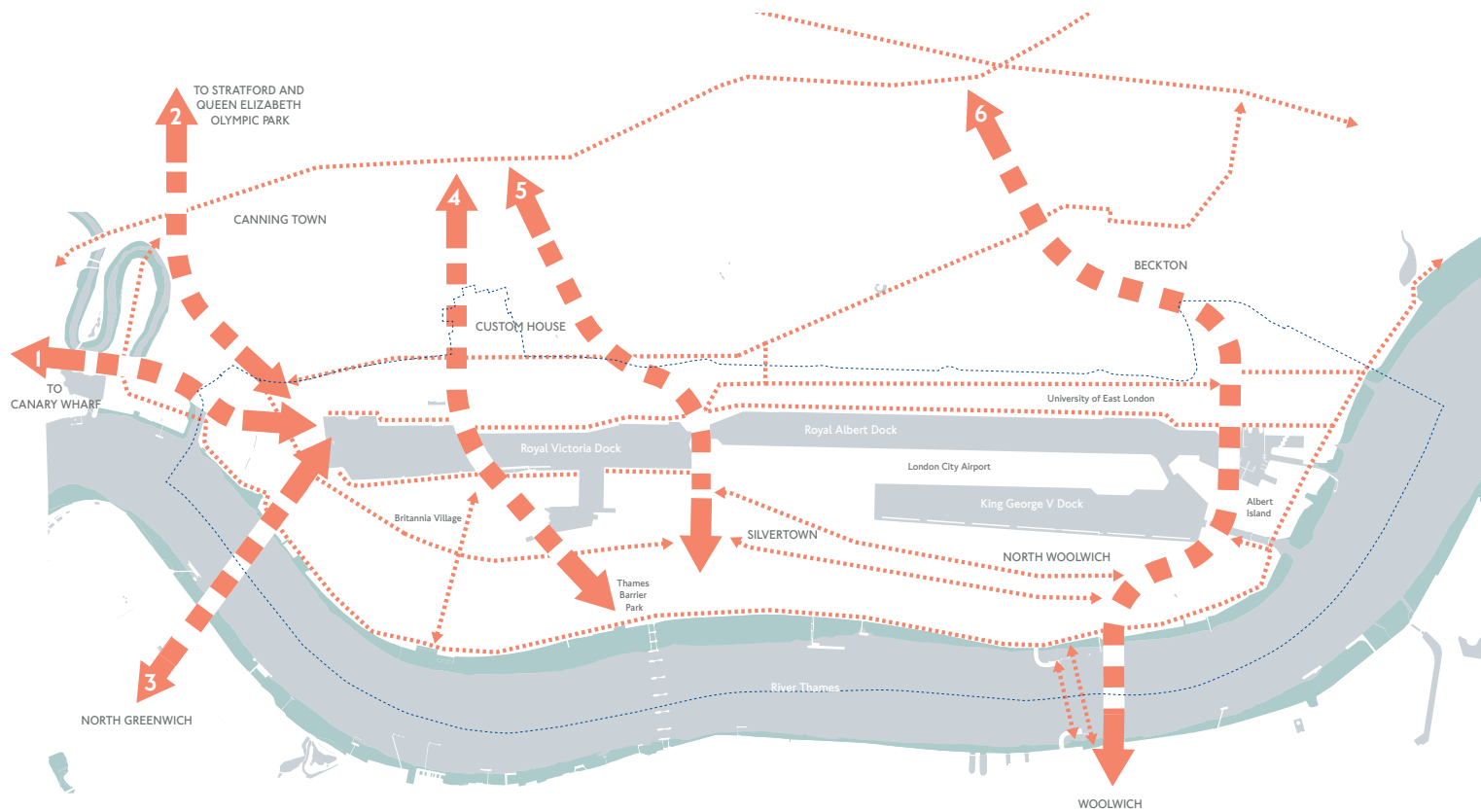
An important corridor connecting a number of existing and emerging neighbourhoods. Walking and cycling improvements along North Woolwich Road will be a priority, as well as opening up access to the waterways through emerging development sites.

2.7.5 CONNAUGHT BRIDGE

Investment in walking and cycling connections between Custom House and Silvertown will help to link the communities to the north and south, improving access to jobs, schools and social infrastructure.

2.7.6 ROYAL ALBERT DOCK TO BECKTON

Improving connections between Royal Albert Dock and the emerging ABP development northwards to Beckton, providing access to the Docks for Newham's residents for employment and leisure.

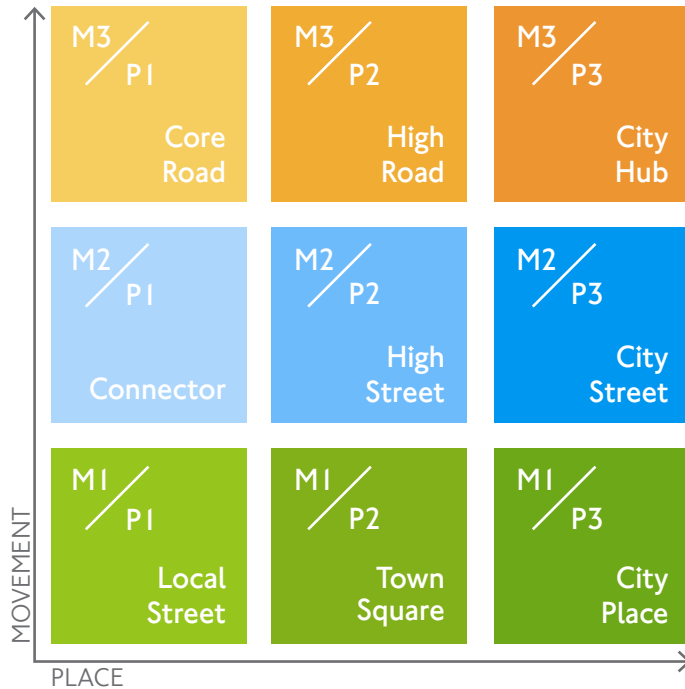


Focus for improving connections to and through the Royal Docks

- 1 Connections to Canary Wharf and beyond
- 2 Connections to Queen Elizabeth Olympic Park along the River Lea
- 3 Cross-river connections
- 4 Connecting surrounding neighbourhoods to Custom House
- 5 Improved connections across the Connaught Bridge
- 6 Improved connections from north of the borough, through Beckton and the Royal Docks to the Thames

----- Study area boundary

3.0 ROADS TASK FORCE STREET TYPES



Street Types for London

The Mayor’s Roads Task Force (RTF) concluded that a ‘one size fits all’ approach could not cater for the unique nature of London’s streets. It established a framework of nine Street Types to provide a common language between developers, designers and neighbouring highway authorities.

3.1 STREET TYPES FOR LONDON

This section outlines how the Mayor’s RTF Street Types can help to create a unifying context to ensure appropriate design treatment is evenly applied across an area. This is especially important for the Royal Docks as we expect it to experience increased travel demand along with a need for more liveable space.

Street Types classify the road network according to three hierarchical tiers for both ‘Movement’ and ‘Place’ (as illustrated on the matrix opposite). Movement is loosely defined in terms of people (and goods) and therefore accounts for levels of bus occupancy, cyclists and freight as well as general traffic. Place captures activities which attract people to spend time on the street or in areas adjacent to the street. This is distinct from the movement function of simply walking through an area to another destination.

3.1.1 THE STREET TYPE CLASSIFICATION PROCESS

We classify Street Types for every road through a series of facilitated workshops with the relevant London borough. This process has begun in the Royal Docks area with LBN and the following design advice is a product of that evolving discussion.

Strategic data is provided to inform the existing classification in Stages 2 and 3 which is principally a judgement of officers specialising in traffic management, scheme design, regeneration and planning. Future Street Types in Stage 4 attempts to resolve issues that arise where the form of a street does not match its current or future function. It collates evidence relating to new development, major transport schemes, and aspirations for land use and overlays them onto the network. Further information on this process is available via street-types@tfl.gov.uk or via the website www.tfl.gov.uk/street-types.



Street Types classification process