

# The Low Line:

Movement, connectivity  
and accessibility

**BARBERS**  
Upstairs  
{at Arch 49}  
**OPEN**  
WED-SAT: 11-7  
SUNDAY: 11-5

ENTRANCE

BUCKLE UP

COMPTON  
GOURMET  
CAFÉ & BAKERY  
See our hours in yellow, which you  
may or may not see  
↑  
1 Minute Walk

**\_Low\_Line**

The Low Line: movement, connectivity and accessibility

May 2021

This report was commissioned by the Low Line partners, and funded by the Mayor of London's Good Growth Fund.

Urban Movement were commissioned in May 2020 to undertake this study.

Urban Movement are a team of urban designers, planners, landscape architects and engineers specialising in the design of streets, public spaces and sustainable transport strategies.

**\_Low\_Line**

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## Executive Summary

A bold and distinctive approach to movement, connectivity and accessibility on the Low Line would be transformative for walking and cycling, enhancing the Low Line as a community resource, visitor destination and hub for enterprise and green growth.

This report defines the alignment of the Low Line walking and cycling route that will guide people along the railway viaduct from Southwark Tube Station to The Blue Market in Bermondsey. The report assesses the routing options and street environments, before proposing a series of walking and cycling routes.

A set of design approaches that can be employed to implement the route are also provided. These include placemaking and wayfinding schemes, focus areas for street improvements and public realm works, and interventions to improve cycle infrastructure.

These approaches are then applied to several focus areas along the route, illustrating how street and public realm improvements can be achieved through a variety of areas with different contexts and challenges, specifically:

- Scoresby Street
- America Street
- Southwark Street
- Holyrood Street
- Druid Street
- St James's Road



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# Section 1: Introduction

The following section introduces the Low Line project, sets out the policy context and the methodology for defining the Low Line route.

# Introduction

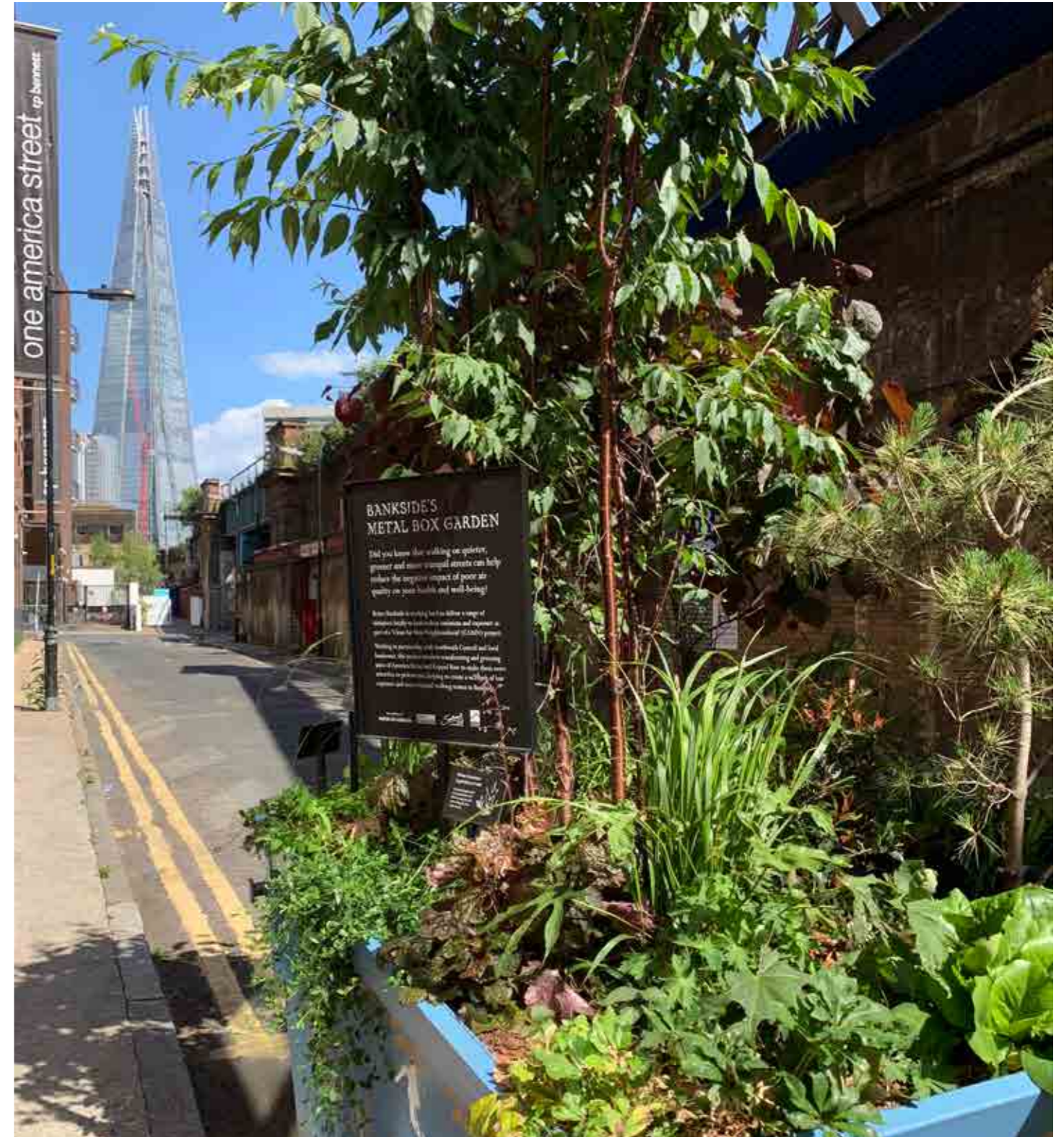
When the London and Greenwich Railway was constructed in the 1830s, the first elevated viaduct in London, a promenade was created alongside it. But this space for walking has been neglected for many years. As such, many streets and spaces are difficult to navigate, of inconsistent quality, without pavements or with no access at all. This is a barrier to mobility, particularly walking and cycling, and stifles growth, opportunity and wellbeing.

This study focuses on provision for walking and cycling along the 2.5 mile stretch of historic viaduct - a Low Line "to link existing centres of activity and enterprise by creating new attractive routes alongside rail arches and viaducts and their associated spaces and streets" (Policy 49, New Southwark Plan).

This study identifies issues and challenges that partners will need to overcome to create a high quality walking and cycling experience. It proposes general approaches and specific interventions for meeting the Low Line aspiration, as a coherent and unifying piece of urban infrastructure, and a series of distinct spaces and neighbourhoods.

The authors at Urban Movement have delivered this work during the Covid pandemic, making local engagement difficult. However, what is clear from the site visits, conversations and online workshops is that ingredients are in place to make the Low Line both a locally loved community asset and a visitor destination. Key partners are on board, including Southwark Council and GLA, and the route has a rich mix of enterprise and activity along its course, including world renowned attractions like Borough Market and The Shard.

This work on walking and cycling can benefit from complementary programmes. This study was done in parallel with the Low Line Commons greening strategy, and there is potential to establish a pioneering approach to Green Streets – an objective of the borough Climate strategy. There is new funding for promoting e-cargo bikes for freight along the Low Line to align with an objective of reducing traffic, pollution and noise. Additionally, Southwark Council has implemented experimental Low Traffic schemes along the Low Line linked to Covid recovery. The momentum from these complementary programmes make this an opportune time to focus on the wider connectivity of the Low Line.



# Policy context

Investment in the Low Line as a place to walk and cycle, as well as a low traffic environment, will help TfL and Southwark Council meet multiple policy goals. Some of the most relevant of these are discussed below.

## Mayor's Transport Strategy, 2018 Transport for London

The Mayor's Transport Strategy advocates that London's streets should be for active travel and social interaction, but that too often they are places for cars, not people.

A key policy aim is for 80% of trips in London to be made by walking, cycling or public transport by 2041, increasing from a base of 63% of trips (2018).

The MTS also applies the Healthy Streets Approach with the aim of creating safe and attractive environments to encourage more people to walk, cycle and use public transport.

## Southwark Draft Climate Strategy, Aug 2020

Southwark Council has declared a climate emergency and committed to do everything it can to make the borough carbon neutral by 2030. Proposed areas of work relevant to this study (and the Low Line Commons greening strategy being written in parallel) include:

### Transport and travel

- To make cycling and walking easier;
- Discourage the ownership and use of polluting private cars;
- Improve the accessibility and sustainability of public transport.

### Biodiversity, trees and green spaces

- Greener streets, with more planting and fewer cars, making our streets places for nature to flourish.
- Improved biodiversity with green corridors to help wildlife to move.
- Increasing tree coverage across the borough with more planting and loss of existing trees as a last resort.
- Residents in touch with nature, more "grow your own" and community gardening.
- Building and development that works alongside and enhancing our natural environment.

## LOW LINE: MOVEMENT, CONNECTIVITY & ACCESSIBILITY

## Healthy Streets Indicators and the Low Line

The Healthy Streets Approach has been adopted by TfL in order to create streets that best support public health through encouraging active healthy lifestyles and enabling better quality of life. A summary of the 10 Healthy Streets Indicators and the implications and possibilities for the Low Line is set out below.



### Not too noisy

The Low Line should seek to make use of quieter streets where possible.

### Pedestrians from all walks of life

The Low Line should be appealing to the whole community, including children, older people and disabled people.

### Easy to cross

The Low Line crosses several high-traffic streets. Ensuring that good quality crossings are present and well-located is a key consideration to create a continuous, safe and pleasant walking route.

### Clean air

Ensuring communities and visitors to the Low Line are exposed to as little air pollution as possible will create a healthier place. Reducing through-traffic where possible or encouraging EV charging or cycling deliveries for businesses will help to reduce pollution from vehicles. Planting more trees and greenery can also help to absorb harmful pollutants.

### People choose to walk and cycle and take public transport

Creating an environment that supports people to walk, cycle or take public transport, is vital to the Low Line, how it integrates with communities, supports businesses and attracts visitors.

### Things to see and do

'People are more likely to use our streets when their journey is interesting and stimulating' (p13).

While this is important for all journeys, it is particularly pertinent for the Low Line. As a leisure walking and cycling route, the Low Line needs to capitalise on its rich architectural and cultural history, and to be active and lively to attract visitors to the area.

### People feel relaxed

The Low Line should create a relaxed environment for people, where the streets are not dominated by vehicles, and pavements are good quality and not crowded.

### Shade and shelter

Providing shade and shelter from wind, rain and strong sunshine enables people to use and enjoy streets and spaces all year round. The Low Line is peppered with covered spaces (namely tunnels), however addressing the quality of these spaces or increasing tree canopy cover for example could improve provision.

### People feel safe

Actual or perceived road danger and threats to personal safety and security discourage people from using streets. Ensuring street environments feel and are safe to use at different times of the day will help to encourage its use.

### Places to stop and rest

Places to rest are vital to enable those with limited mobility to get around. The Low Line should provide plenty of opportunities to stop and rest to enable everyone to access and enjoy spending time in the area.

## Movement Plan, 2019 LB Southwark

Southwark's Movement Plan sets out key ideas and policies, with a focus on people, place and experience. A summary of the 9 key policies and their implications for the Low Line is set out below.

### People

#### M1: Equity

Ensuring transport and movement helps to provide equal opportunities to all, and does not disadvantage people through addressing affordability, connectivity, accessibility, health + wellbeing, pollution and safety.

#### M2: Mental wellbeing

Work to mitigate noise pollution, create clear and simple streets free from clutter, and provide things to see and do (such as creative initiatives, pocket parks + greenery) to support the mental health and wellbeing of communities.

#### M3: Physical wellbeing

Supporting new and sustained active travel through behaviour change and infrastructure- creating attractive, connected walking and cycling networks.

### Place

#### M4: Reduce traffic

Introduce measures such as traffic restrictions (e.g. low traffic neighbourhoods) and reallocate space from cars to people.

#### M5: Streets as social spaces

Creating incidental space for socialising, using timed traffic restrictions and introducing play streets and school streets.

#### M6: Support businesses to prosper

Ensure safe and accessible town centres, better manage the kerbside and improve the public realm.

### Experience

#### M7: Journey experience

#### M8: Managing change

#### M9: Working together

## The New Southwark Plan

The emerging Southwark Plan is a key planning policy document, and several policies support the development of the Low Line route, specifically:

### Policy 49: Low Line routes

Development must support the implementation of 'Low Line' routes across our borough. Development hindering or obstructing the implementation of 'Low Line' routes will not be permitted.

### Reasons

Southwark's 'Low Line' walking routes link existing centres of activity and enterprise by creating new attractive routes alongside rail arches and viaducts and their associated spaces and streets. The Low Line routes will facilitate economic growth and improve access and permeability along the rail viaducts

# Route selection criteria

## Defining a Low Line route

The Low Line should be legible, accessible and safe. It should seek to create an alignment for walking along the viaduct, and also for linking up local destinations, supporting growth and opportunities for businesses, culture and communities to flourish.

The following criteria are assessed to help define the Low Line priorities.

### Public access

The Low Line route should be accessible 24/7. The route should mostly cross public land, however private land could be considered where accessibility at all or most times of the day can be achieved, and where an alternative route could be provided in the event of closure.

### Things to see and do

The Low Line is about celebrating the unique history, and both historic and current culture of the area around the railway viaduct. The route should be a destination and attraction in its own right. The route should encourage people to explore the culture of the area, taking in key historic and cultural points of interest, as well as encouraging people to use and enjoy the many businesses that reside on the Low Line.

### Business + cultural activity

The Low Line route should support existing businesses and communities, encouraging footfall to support retail, food + drink establishments, and providing communities with more accessible, high quality neighbourhood environments.

### Growth + development

The Low Line route should support and help to stimulate growth where appropriate, encouraging vacant arches to come into use, or tying in with development sites to support economic growth and community development.

### Traffic volumes

High traffic volumes, high vehicle speeds and a high proportion of HGVs are key factors considered in Transport for London's Healthy Streets Check. These lead to conditions that detract from the street environment such as poor air quality, noisy environments, poor road safety. The Low Line route should provide a pleasant 'back' walking route, avoiding running along high traffic streets where possible, while accepting that such streets will need to be crossed at various points.

### Visibility + legibility

There is no continuous direct route alongside the Low Line, and as such wayfinding and legibility are key. The viaduct itself provides a constant wayfinding tool, and this should be visible for as much of the route as possible. There are also 2 sides to the Low Line (i.e. north of the viaduct, and south of the viaduct). Instances where it is necessary to cross from one side to the other should be clear and legible.

## Street environment assessment

It is also important to understand the quality of the street environment in order to develop the measures needed to implement the Low Line route(s). Key criteria include considering the quality and accessibility of footways; crossing points and junctions; permeability for people cycling as well as other factors affecting the public realm.



# Section 2: Route selection

This section assesses the different Low Line walking and cycling route options and possibilities. Information is drawn from publicly accessible data, from high level observational assessment by the report authors and contributed by partners

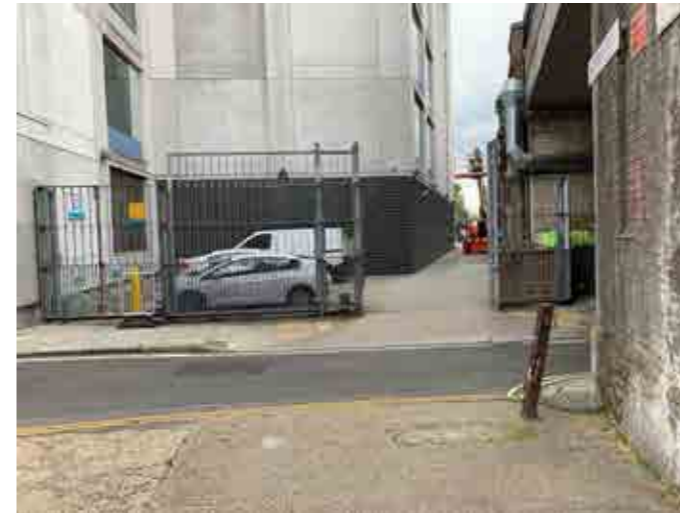


# Public access

Public access is vital to the Low Line. The map below shows the the degree of public access along the Low Line route options. This includes fully public areas (i.e. streets or paths designated as public highway), spaces that are physically accessible to the public at all times, though are within private land or land that is not part of the public highway, private spaces that are open to the public at certain times, and private spaces that are closed to the public.

Many key spaces alongside the Low Line are privately owned with some degree of public access restrictions. These are often yard spaces, which characterise the Low Line and reflect it's history. Some of these are working, industrial spaces and are therefore closed to the public. Others are open to the public providing hubs of activity for the evening and weekend economy in particular.

Incorporating these spaces into the Low Line route would ensure users of the route take in key attractions, however alternative routes would be needed in the event that these private spaces are closed temporarily or routinely.



LB Southwark gated yard.



Ewer Street private yard.



# Vehicle traffic

The map below shows the main 'barrier streets' in the Low Line area. These streets carry the majority of through-traffic and therefore pose significant barriers to walking and cycling. Often these are part of the TLRN network. This means they are part of the London-wide strategic vehicle network, and are therefore owned and managed by Transport for London as opposed to the local authority (LB Southwark).

The map also shows vehicle counts (annual average daily flows) for some of the key streets in the area using available data from the Department for Transport. High traffic streets score poorly when using the Healthy Streets Indicators as this creates a noisier, more polluted and less safe environment for walking and cycling. Also shown are the 2019 cycle counts, which show cyclists make up a significant proportion of traffic on streets in

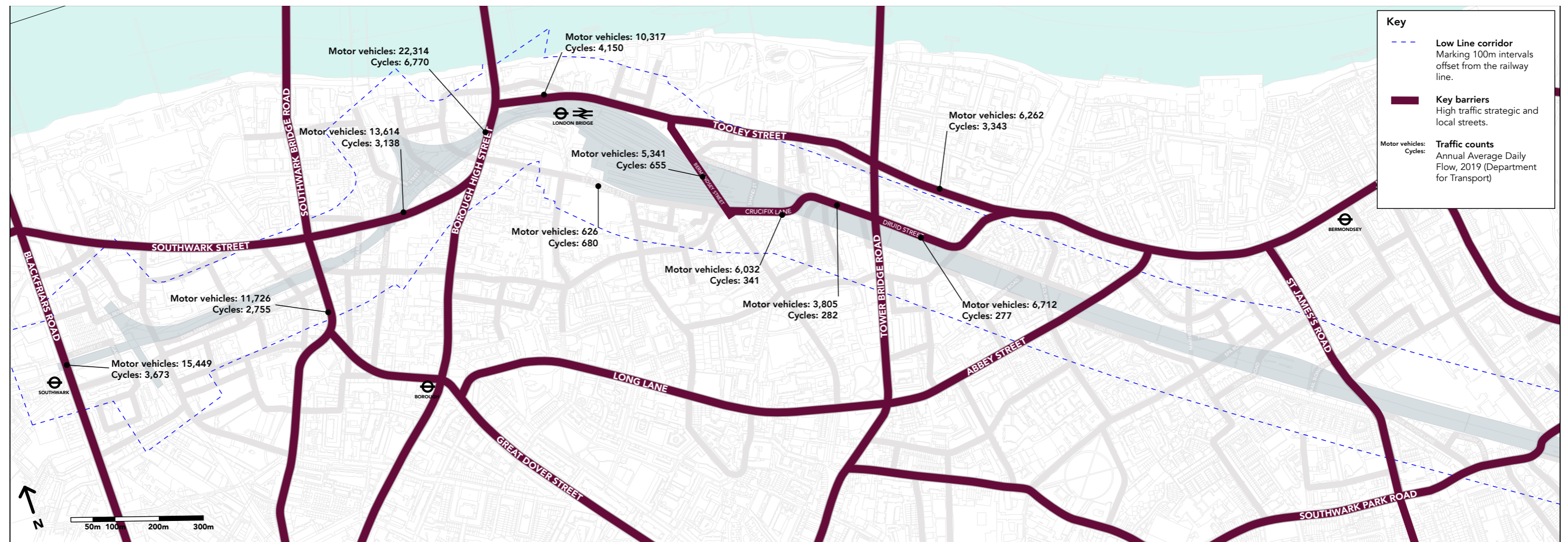
the Low Line area.

The Low Line route should therefore avoid using these streets where possible, to ensure a safer, more attractive and healthier street environment that can better support walking, cycling and public life and activity.

The majority of these streets cross perpendicularly to the Low Line i.e. cross the viaduct through tunnels north-south. The challenge here is to ensure the Low Line route is not severed by these streets, and safe crossing points are located on the appropriate desire lines. Southwark Bridge Road and Tower Bridge Road are key examples of this.

Other streets travel along the Low Line, and therefore how these can be avoided, or made more pleasant for

walking and cycling is key to the success of the Low Line. Druid Street (west) and Crucifix Lane are key examples of this.



# Collisions

The maps below show collisions occurring in the Low Line area in the 36 months to the end of October 2019.

The map on the left shows the types of collisions according to the types of road users involved. A high proportion of collisions involved pedestrians (25%) and cyclists (38%). Motorcycles are also highly represented, being involved in 18% of collisions.

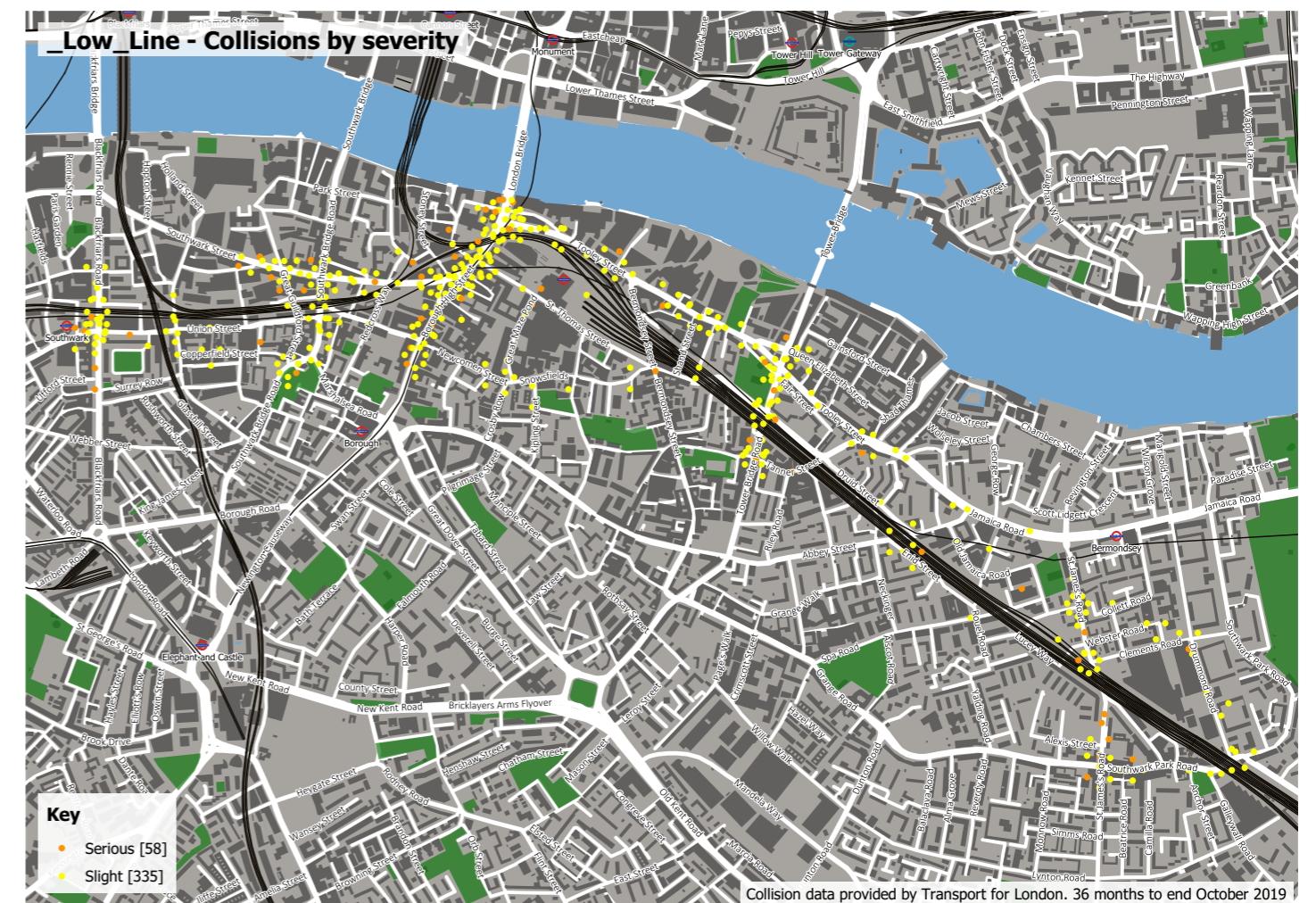
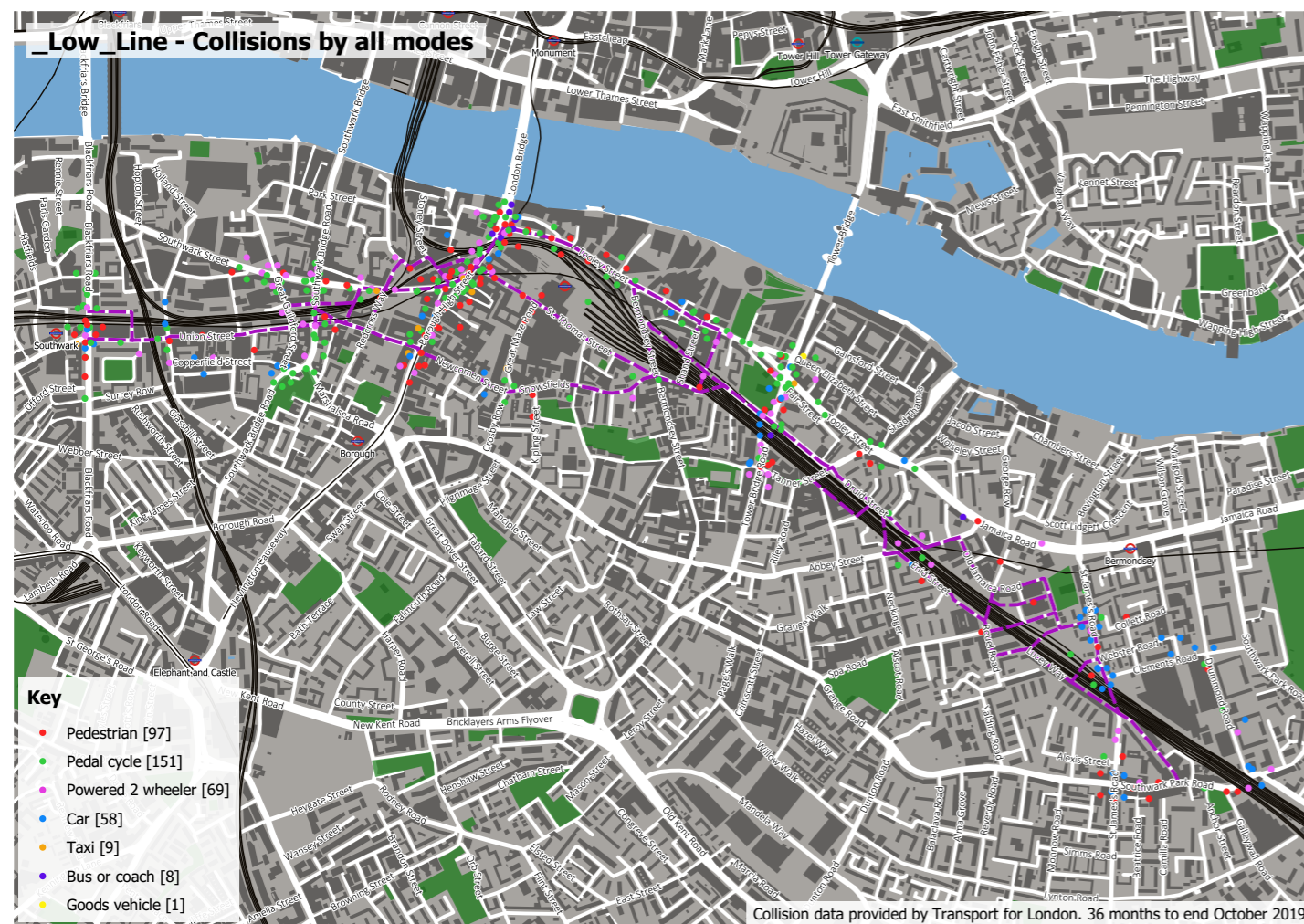
There are clear hotspots for collisions centred around high-traffic strategic streets including Southwark Bridge Road, Southwark Street, Tower Bridge Road and Tooley Street. Junctions are often hotspots for collisions, and the Southwark Street/Borough High Street junction is particularly a cause for concern. This area sees high numbers of pedestrians attracted by Borough Market and London Bridge Station, as well as high traffic levels, being

a main vehicle route into the City. There are also high levels of cycling, forming a main commuter route, though notably a lack of protected space for cycling at the time of the data collection.

There are notable clusters of collisions around St James Road largely involving cars. Attracting more pedestrians and cyclists to this area through the Low Line may require safety improvements such as formal crossings or traffic calming to prevent increases in collisions.

Whilst safety issues can be addressed, it would be preferable for the Low Line route to avoid interaction with these hotspots where possible, due to the high levels of interaction between pedestrians, cyclists and vehicles, and the less attractive environment this creates.

The map to the right shows the severity of collisions in the Low Line area. As to be expected, the vast majority of collisions are classed as 'slight' with 15% classed as 'severe.'



# Activity, growth + development

The plan below shows key areas in the Low Line vicinity that act as attractors and hubs for activity, including collections of bars, cafes, restaurants and pubs as well as cultural attractions.

Encouraging footfall to these areas is a key function and aim of the Low Line route(s), to support local businesses and cultural activities.

This includes key established areas such as Flat Iron Square, Borough Market, London Bridge, as well as areas that are still establishing and evolving such as Druid Street East and Spa Terminus Market.

The map also shows areas that are set to undergo significant change or regeneration. This includes known planning application sites, or spaces where arch

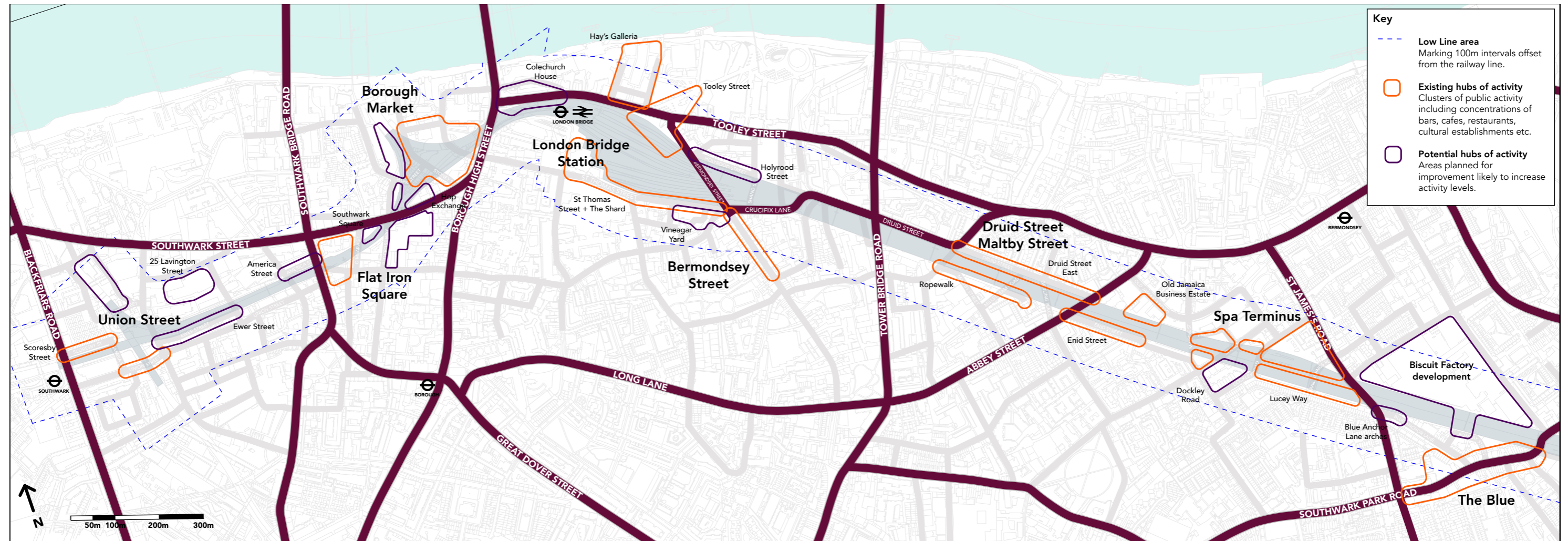
refurbishments are planned. These are identified in the Low Line Horizon Scanning Report (2019), and will be subject to the Low Line planning policy to create new routes.

Encouraging footfall to these areas through the Low Line route would help to support development, growth and regeneration along the Low Line.

Sites shown include major development sites such as around Vineagar Yard and London Bridge, Southwark Street and the Biscuit Factory towards Bermondsey.

Also highlighted are smaller arch refurbishment schemes such as those at America Street, Holyrood Street and Blue Anchor Lane.

Improving the street environment and public realm around these sites through the Low Line project would help to support successful development, regeneration and create a desirable location for business opportunities.



# Existing walking routes

There are several existing walking routes that overlap or run adjacent to the Low Line, so it can form part of a network of popular and iconic London walks. These tend to have their own wayfinding systems.

The Thames Path and several Jubilee Walks run parallel to the Low Line. This creates the potential for a circular route.

The Tate Modern route provides a waymarked route from Southwark Station to the Tate Modern, using distinctive orange coloured lamp columns to guide people along Union Street and Great Suffolk Street.

The Low Line also overlaps with the Footways network in central London, which seeks to highlight a “network of interesting and quiet streets for walking.” The Low Line is considered part of this network, and therefore any improvements or upgrades along the Low Line will serve the dual purpose of also strengthening the wider Footways network. It is understood that the footways network will be updated regularly to reflect schemes such as the Low Line.

The Low Line has also been identified as a route on the Central London Walking Network, which has received support from the London Walking and Cycling Commissioner.

Existing routes are concentrated in central London (Central Activities Zone), as is much of the Low Line. Drawing people outwards and along the Low Line presents a key aim and challenge for this project, and an opportunity for the many businesses in the area.



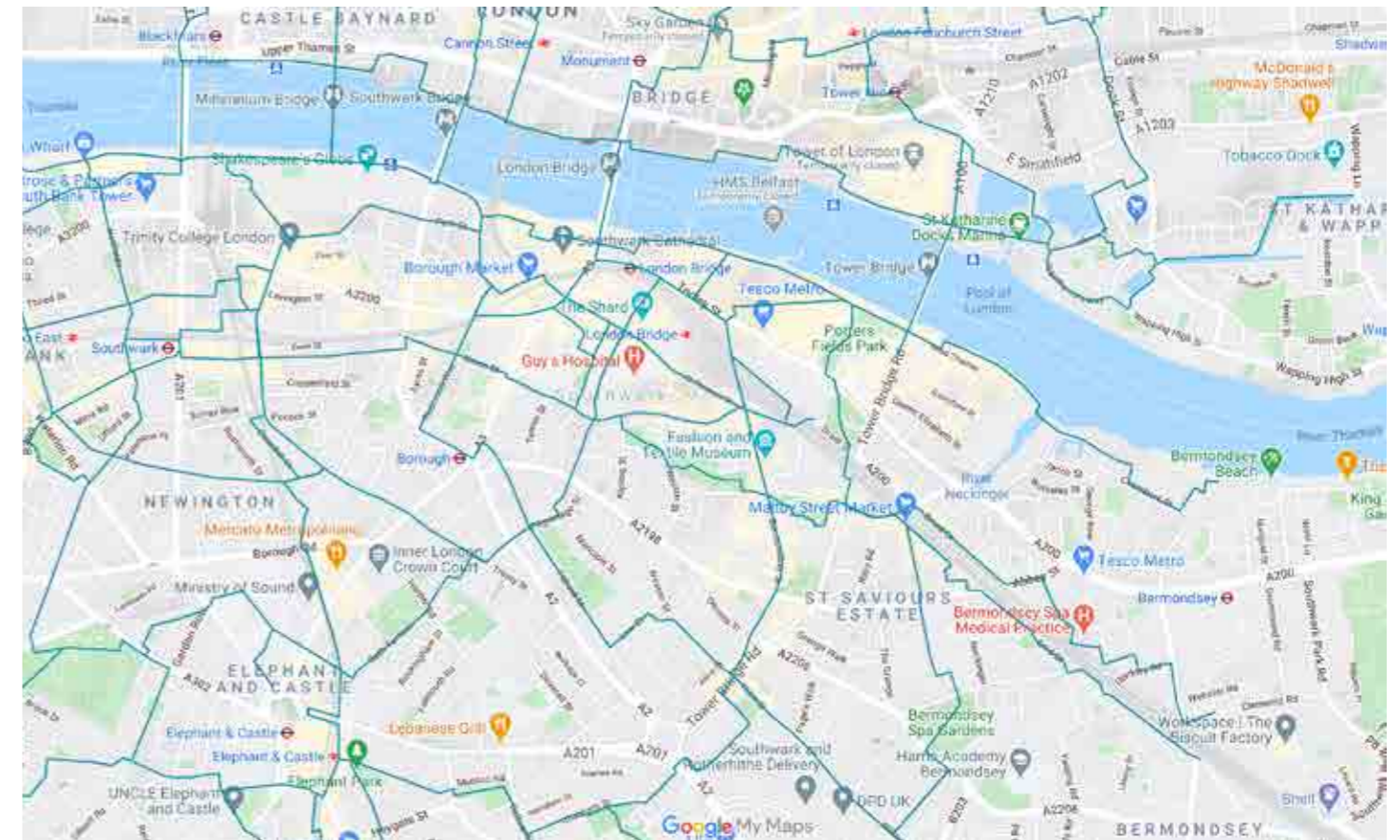
Orange lamp columns indicate the Tate Modern walking route between the gallery and Southwark tube station.



Jubilee Greenway route



Jubilee Loop (eastern section)



Central London Footways map, produced by Urban Good and Living Streets London.

# Wayfinding

It is important that the Low Line route creates a strong identity and provides a navigable, legible route.

The Low Line is centred around the railway arches which cut a distinctive and unique form. The railway provides a constant confirmation that a person is on the Low Line route, however there is no continuous unimpeded walking route that follows the entire railway line. Maintaining this visual connection with the railway viaduct is a key wayfinding and legibility aid. There is generally good visibility of the viaduct, however several locations lack visibility, such as parts of Union Street and St Thomas Street, where additional wayfinding aids such as floor plaques or fingerpost signage could be useful.

The Shard provides a key landmark along the route, and is visible at various points throughout the Low Line area. It's position at London Bridge also means it is a useful landmark and wayfinding aid.

Currently a small section of the Low Line is marked by plaques and markers mounted on the structure itself. This helps to confirm that the section is indeed on the Low Line route and is accessible to the public. A good example of this is Ewer Street, where public access is perhaps dissuaded by the sense of privacy that the environment creates. Such measures could therefore be useful as confirmatory markers in the wider route.

The Low Line is already adorned with a variety of quirky and eye-catching objects and installations. This includes the Skip Garden at America Street, which provides a creative solution to urban greening, lighting installations and cultural expression, such as the Crossbones memorial. These things together help to create a brand and identity to the Low Line centred around creative expression and ideas. This form of wayfinding provides more opportunities for people to explore the area, finding their own way, as opposed to relying on traditional wayfinding aids such as maps and signage.



The Shard is visible from various points- pictured here looking from America Street.



Public art installation on Southwark Street under an arch provides a distinctive point of interest.



The Skip Garden on America Street is an unexpected addition to the street and provides a reminder of the Low Line route without the use of signage.



The water tower on Dockley Road/Lucey Way is a distinctive and highly visible feature along the Low Line, however it remains closed off.



Existing markers are provided on the Low Line railway structure, though these tend to be confined to the western side. General information about the Low Line is provided on plaques in some places.



A successful gateway treatment at Ropewalk creates a sense of arrival and aids navigation.

# Existing cycle routes

The map to the right shows the existing cycle network in the Low Line area and surroundings.

Cycleway (quietway) 14 follows the Low Line area most closely, and provides an existing cycle route that could be grown or expanded upon to create a denser, more connected network. Cycleway 4 is a new scheme under construction, and will provide a link between London Bridge and Greenwich. Cycle Superhighway 7 runs north-south along Southwark Bridge Road. This route has recently been upgraded to provide protected space for cycling. Cycle Superhighway 6 also runs north-south along Blackfriars Road. This provides a high quality fully segregated route.

Recent improvements as part of the Streetspace Scheme in London have created improvements to existing routes, and introduced new measures to create safer streets for cycling. This includes a low traffic neighbourhood in the Union Street area including modal filters to reduce vehicle through-traffic. Modal filters have also been introduced on The Cut to the west of the Low Line, creating a better cycle connection to the start of the Low Line route. Temporary semi-segregated cycle lanes have also been created on Borough High Street and London Bridge.

The map shows the cycle network tends to be denser towards the London Bridge and Southwark end of the Low Line. Routes towards the Bermondsey end are lacking, and improvements here would help to improve cycle access to the Low Line, and support the wider sustainable and active travel agendas of LB Southwark and Transport for London.



# Section 3:

# Street environment

This section assesses in more detail the quality and accessibility of the existing street environment in the Low Line area to help identify the key design issues and inform the interventions required. Information is based on high level observation by report authors and information collected through the project with partners and community members.



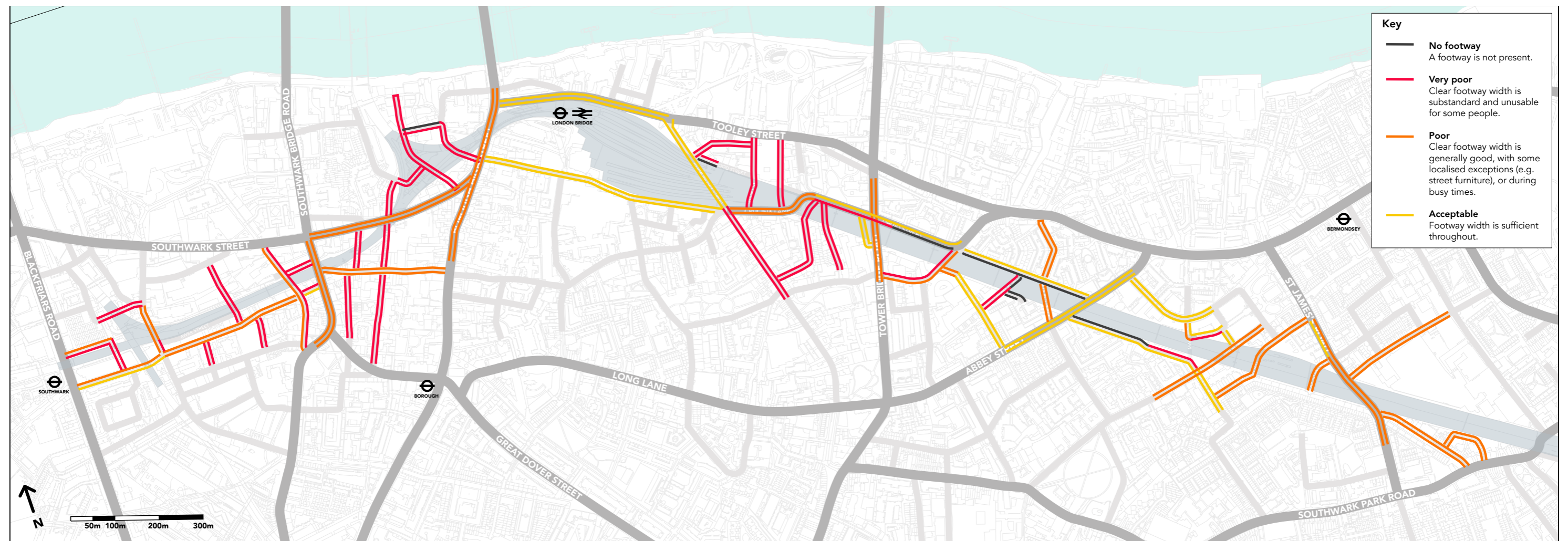
# Footway width

The map below shows a high level assessment of footway widths throughout the Low Line area. Inadequate footway width includes those that are under 2m in width, or footways that are cluttered. Busier footways where there are high footfall levels such as those around train and tube stations should also be wider to accommodate users.

The map shows that footway width is a key problem. Firstly there are several places where footways are not present, notably around the Druid Street and Enid Street areas. There are also many instances of 'very poor' conditions, which are concentrated towards the western, Soutwark and London Bridge end of the Low Line. Here, narrow footways characterise the historic street environment. Widening footways whilst maintaining vehicle access is often not possible in these narrow street

environments, and a more innovative approach, assessing access needs or creating pedestrian priority streets could be utilised.

Conditions towards Bermondsey generally improve, with more 'acceptable' footways. However, 'poor' conditions are still common, and decultering or addressing localised narrow points would help to improve the accessibility of the street environment.





# Side road junctions

The quality of the walking environment is significantly affected by side road junctions and the quality of pedestrian crossings over them.

The map below shows an assessment of the accessibility of side road crossings throughout the Low Line area.

The highest levels of accessibility are associated with raised table treatments, good quality and intact surfaces and tactile paving applied correctly. The poorest levels highlight instances where dropped kerbs or level surfaces are not present and tactile paving is missing or incorrect.

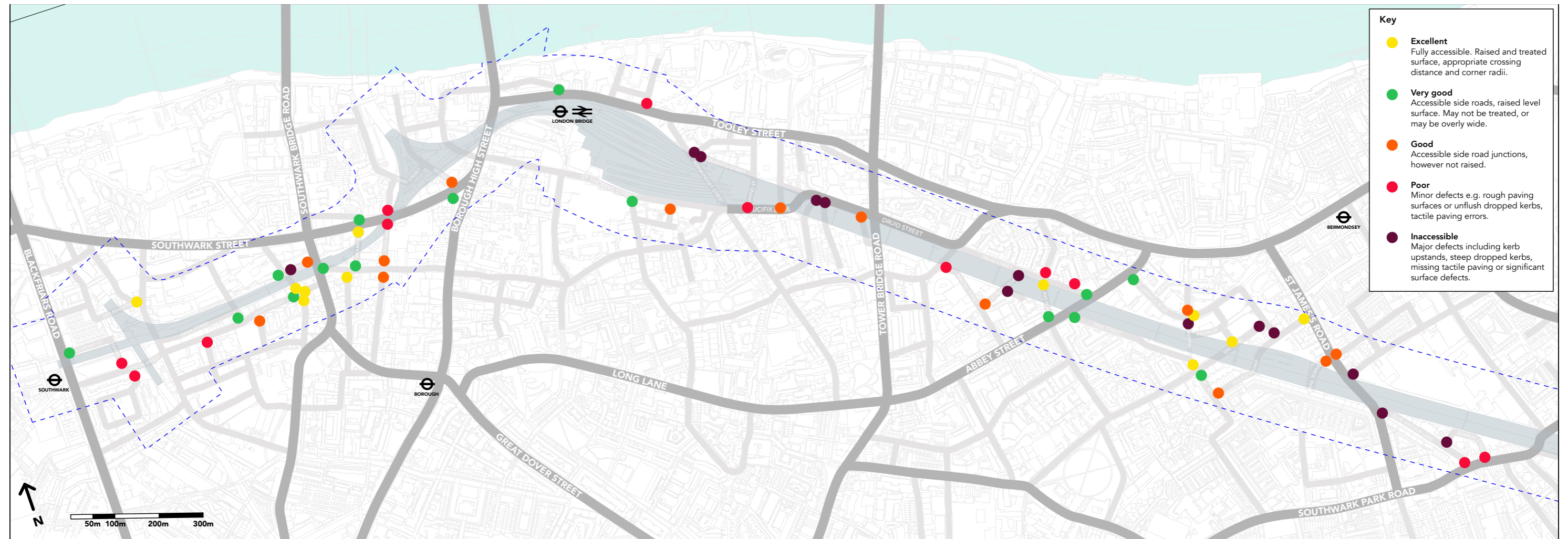
Of the 64 junctions assessed, 25 (39%) were considered 'poor' or 'inaccessible.'

There is no strong pattern, though there are more

'inaccessible' side road junctions between London Bridge and Bermondsey. At a hyper local level, schemes that have introduced several side road junction treatments can be seen- such as those at Abbey Street.

Generally, there lacks a common approach to treating side road junctions throughout the Low Line. Whilst variance in the public realm or streetscape treatment would be expected considering the Low Line spans such a large area, the level of accessibility should be consistent, and seek to meet the standards set out in LB Southwark's Streetscape Design Manual.

To bring side road junctions up to standard for accessibility, small interventions such as dropped kerbs for the Low Line route could be made as a matter of course during maintenance work.



# Footway crossovers

The quality of the Low Line walking environment is significantly impacted by the quality of footway or vehicle crossovers, which in many instances can cause footways to be inaccessible to some people.

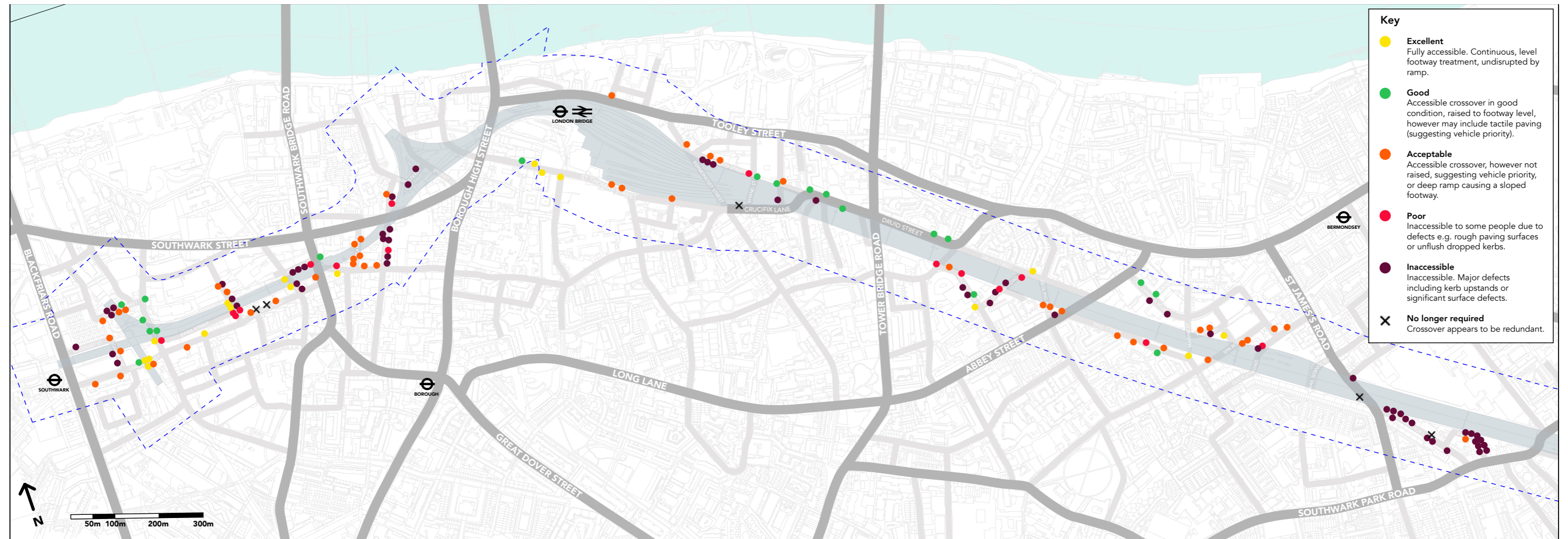
Vehicle crossovers are instances where vehicles must cross the footway to access a property, for example an estate car park, driveway or building. In some cases the footway environment is uninterrupted, i.e. there is no change in priority, surface treatment or level; in others, the footway ends and a dropped kerb is provided, indicating that vehicles have the priority.

The quality and accessibility of vehicle crossovers is a key issue across the Low Line.

Of 158 vehicle crossovers, 72 (46%) were considered poor

or inaccessible. These pose as barriers to people walking, and particularly those with a disability.

There is no discernible pattern, however streets such as Blue Anchor Lane and Redcross Way are particularly characterised by poor quality crossovers.



# Crossings

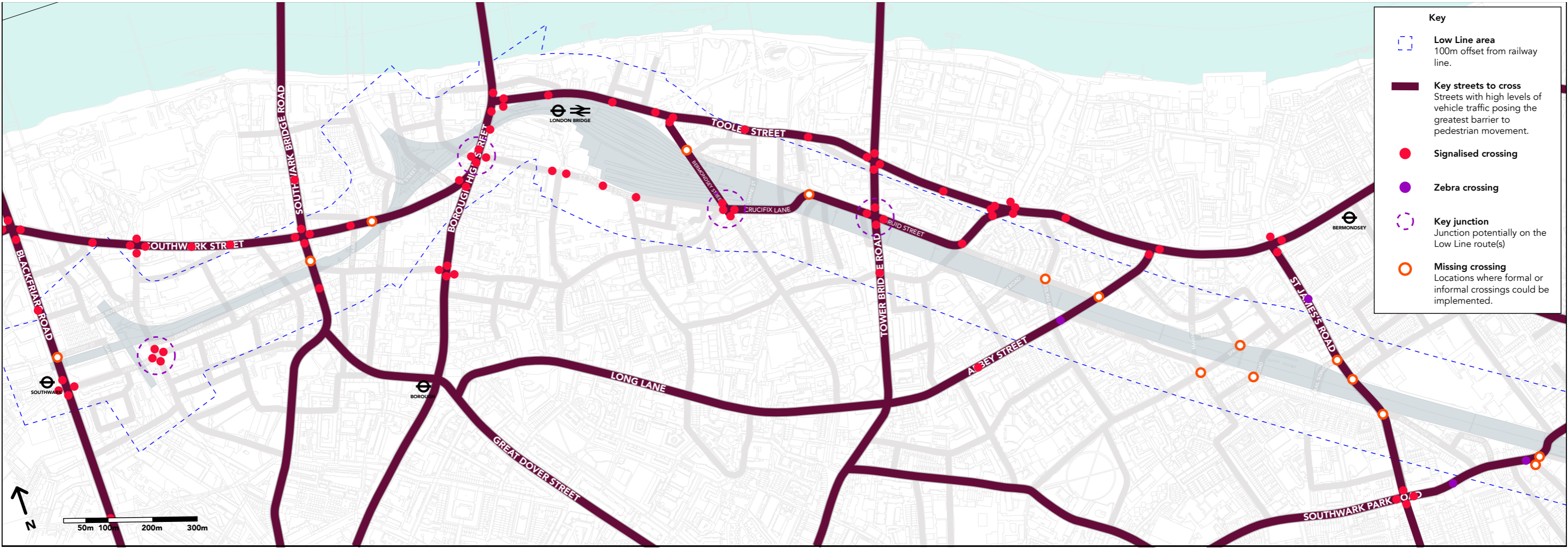
The map below shows existing formal crossings within the Low Line area, the key junctions along the route, and where crossings are missing.

Key junctions include Union Street/Great Suffolk Street; Borough High Street/St Thomas Street; Bermondsey Street/Crucifix Lane; and Tower Bridge Road/Druid Street.

Various issues include a lack of footway space around junctions, poorly aligned pedestrian crossings, a lack of cycle traffic signals and overly complex or vehicle orientated environments.

Locations where crossings could be required as part of the Low Line route(s) are also highlighted, as are the streets with high traffic volumes.

Additional crossings will be required to ensure that the Low Line route(s) is continuous and seamless, ensuring pedestrians and cyclists can take the optimum desire line. This not only ensures safety, but helps to reinforce the route with regards to wayfinding and legibility.



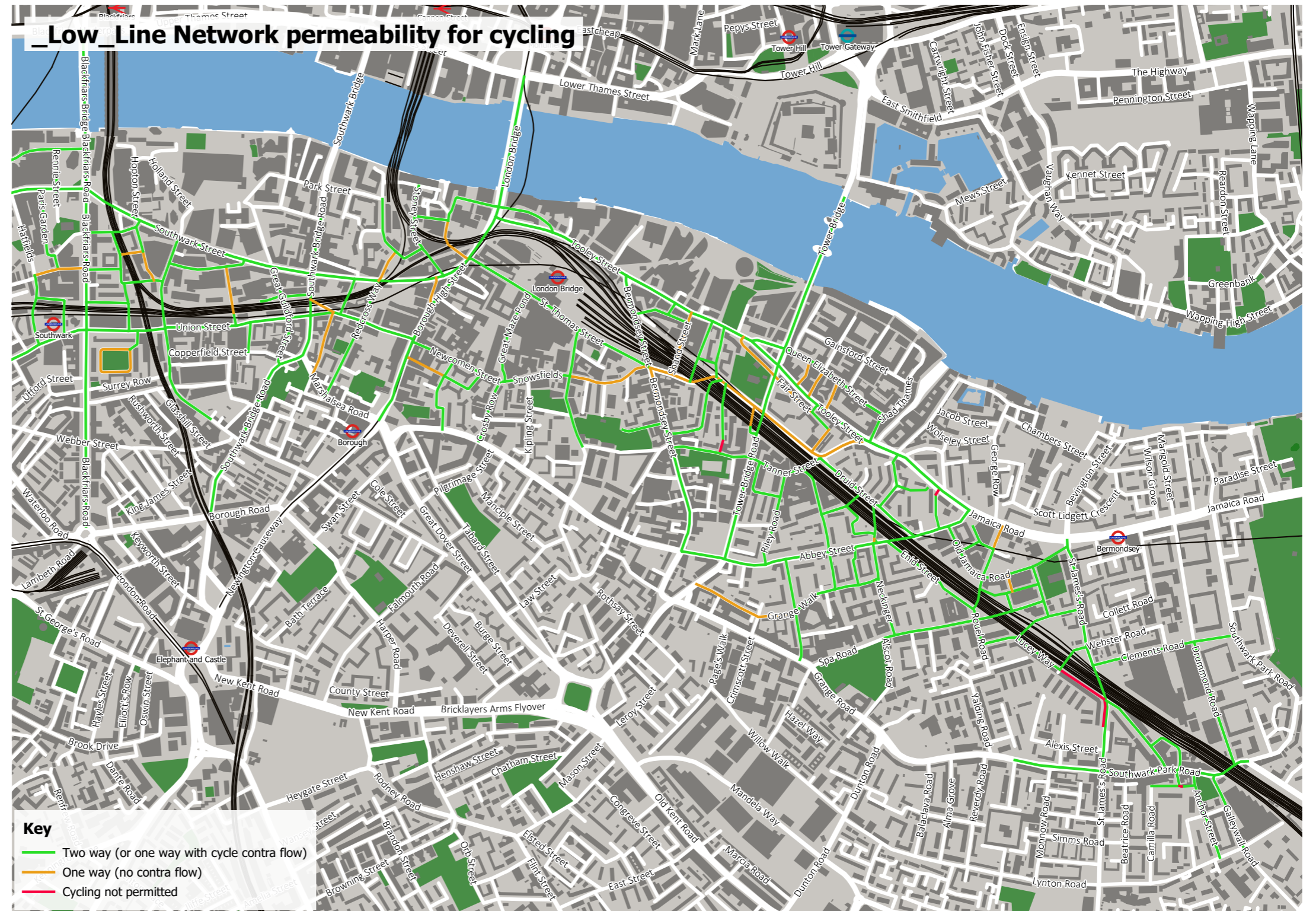
# Cycle permeability

The map to the right shows the level of cycle access and restrictions on the streets within the Low Line area.

Whilst cycle access is generally good, there are some notable exceptions including several minor streets in the Union Street and Borough Market area.

However of most concern are the restrictions on St Thomas Street, Snowsfields, Crucifix Lane and Druid Street to the east, where cycling is only permitted in one direction. These streets provide the most direct Low Line route alignments for cycling, and addressing this in the longer term is key. As a strategic TLRN route, changing the traffic management and cycle restrictions in this area would need careful consideration, including making changes to the signalised junctions.

Another notable exception is Lucey Way towards the eastern, Bermondsey end of the Low Line. This connection is currently through a private (i.e. LB Southwark or housing association) housing estate, however provides a very direct link well connected with the Low Line. Bringing this private road into public use would bring benefits to the local walking and cycling networks and encourage sustainable travel behaviours, as well as providing a vital Low Line link.



# Street conditions

Street conditions along the Low Line vary, however there are patterns and repeated features that indicate a range of typologies. The following pages set out the existing street typologies according to their character and conditions, and highlights the key challenges for each.



**Strategic streets**

**Examples:** Blackfriars Road, Tower Bridge Road, Southwark Bridge Road

#### Characteristics

These streets form strategic connections, and as such are much wider and carry high volumes of traffic. They often form part of the TLRN or are strategic borough roads. They often have multiple lanes for traffic, and sometimes segregated cycle tracks.

#### Challenges

The Low Line tends to cross many of these types of streets, and the challenges therefore include ensuring safe pedestrian and cyclist crossings are present and located appropriately. As these streets are often part of the TLRN, interventions impacting traffic flow will be subject to detailed scrutiny.



**Locally strategic streets**

**Examples:** St James's Road, Abbey Street

#### Characteristics

These streets carry lower (but still significant) volumes of traffic when compared with TLRN and strategic streets, and provide local strategic functions including bus routes. Footway width and quality is often poor.

#### Challenges

The Low Line crosses several of these streets, meaning pedestrian and cycle crossing facilities are key. Traffic levels are too high to provide a good level of service for cycling without segregated facilities along them, yet space is limited.



**Neighbourhood spines**

**Examples:** Union Street, Great Suffolk Street, Great Guildford Street, Spa Road, Dockley Road

**Characteristics:** These streets provide local links through neighbourhoods, however are often subject to high levels of through-traffic.

**Key challenges:** Addressing traffic levels and the quality of the pedestrian footways are key challenges on these streets.

# Street conditions cont.



**Quiet criss-cross streets**

**Examples:** Redcross Way, Barnham Street, Gedling Place

## Characteristics

These streets often cross under the railway, and are found throughout the Low Line area providing key local walking and cycling connections.

Traffic levels are low, and some include one-way working. These streets are narrow in width, and lined with buildings. Footway width and quality is often poor, and the majority of space is given to the carriageway.

Public realm quality is generally low on these streets, with limited activity taking place on them, and sometimes a lack of active or positive frontage. There is a lack of green infrastructure due to the constrained environment, giving them an urban or even industrial character.

As key connectors across the Low Line, these streets incorporate tunnels. While these are often narrow single-span arches, their length can vary greatly.

## Challenges

The Low Line incorporates many of these streets which criss-cross throughout the area. Key challenges include how to improve accessibility with limited footway width, how to improve the environment in tunnels, and how to make space for greening.



**Formal active arch streets**

**Examples:** Scoresby St, America St

**Characteristics:** These streets run alongside the railway line, have active arches along them, and existing (or potential) demand for pavement licencing space or forecourt seating. Their industrial uses are being replaced with leisure, food and drink establishments. Footway quality and width is very poor, however traffic levels are low.

**Challenges:** Managing the kerbside flexibly, creating space for public life and cafe culture within the street whilst ensuring vital vehicle access and loading provision is maintained, and creating safe, accessible street environments for pedestrians.



**Informal active arch streets**

**Examples:** Druid St (east), Enid St

**Characteristics:** These streets run alongside the railway line, and support a range of activity from industrial activity to businesses associated with leisure and the night time economy including breweries, bars and restaurants. They also run through neighbourhoods, and find themselves contested spaces.

**Key challenges:** Common issues and characteristics include the lack of footway space against the arches, informal and poorly regulated parking and loading practices, and a change in use throughout the day/week from industrial activity to the evening leisure economy. Key challenges here include supporting appropriate business activity whilst ensuring safe pedestrian environment.



**Yards + alleys**

**Examples:** Ewer Street, Lucey Way

**Characteristics:** These streets are often privately owned, and sometimes (as in the case of Ewer Street and Lucey Way) accessible to the public. These streets have railway arch frontage and a range of activities taking place. The yards themselves are often single surface spaces without defined footways etc. Low levels of vehicle access are often required.

**Key challenges:** Ensuring these spaces feel open and welcoming is a key challenge, as many involve harsh threshold treatments including gates and fences. Providing some structure to the yards could help to encourage business spill out and public life.



# Key issues + challenges

The following pages summarise the key accessibility and street environment issues commonly expressed along the Low Line. Addressing these through targeted interventions would improve pedestrian and cycle accessibility and create a more coherent and high quality walking and cycling environment.



**Junctions prioritising vehicles over people**

Signalised junctions within areas of lower traffic levels and high pedestrian flows perform poorly, with many people crossing on the red man stage, narrow footways and poor crossing alignments. Furthermore, planned changes to traffic management presents opportunity to consider how best to approach these junction environments.



**Poor visibility on crossing desire lines**

Streets such as Spa Road and Dockley Road involve railway tunnels with bends on their approaches, and therefore suffer from restricted visibility. Often the crossing desire line falls at the mouth of the tunnels, however crossing at these points presents a road safety concern. Raised crossings should meet safety standards.



**Narrow footways**

A significant number of streets along the Low line are of inadequate footway width. This significantly compromises the pedestrian accessibility of the Low Line, and particularly for people with disabilities or specific mobility needs.



**Key barrier junctions**

Key junctions on high traffic, strategic roads such as Tower Bridge Road/Druid St) are hostile spaces, performing poorly for people walking and cycling. Often these lack high quality cycle infrastructure, lack sufficient footway space for pedestrians, have long crossing distances and short green man stages.

While these junctions handle large volumes of traffic, the poor pedestrian and cyclist provision has amplified the severing effect of these streets, and discourages people from exploring areas beyond (such as Bermondsey). Encouraging people to cross these key barrier streets is crucial to the success of the Low Line.



**Side road entry treatments**

Side road treatments across the Low Line lack consistency, and there are several instances where they lack adequate provision to support pedestrian accessibility. This includes missing dropped kerbs and tactile paving. Few side roads are treated with raised tables.



**Poor lighting**

Tunnels are a common and distinctive feature of the Low Line. These vary in architecture and length, with some up to 150m in length. Lighting levels in some tunnels is poor, creating a poor sense of personal safety and road safety.



**Missing footways**

Footways in some instances are absent from one side of the street, creating poorly accessible environments. In the cases of Druid Street and Enid Street, the footway is absent from the active side of the street, limiting access to businesses. This particularly affects vulnerable road users including children and people with disabilities.

# Key issues + challenges cont.



**Threshold treatments**

Gateways and boundary treatments in some instances create spaces which feel (or are) inaccessible or uninviting. Palisade fencing is used commonly as a boundary treatment, even for spaces open to the public such as Spa Terminus. This creates poor visual and physical access to spaces.



**Lack of public seating**

There is a significant lack of public seating in the public realm along the Low Line and most streets lack formal or informal seating opportunities.



**Poor quality footway surfaces + transitions**

Pedestrian accessibility along the Low Line is poor on many streets, with footway surface defects, deterioration and poor treatments at vehicle access points. Addressing these to ensure consistent, level surfaces and smooth transitions would vastly help to improve accessibility of the Low Line, particularly for people with disabilities.



**Parking dominance**

Parking is a key issue in the Bermondsey area, and particularly on streets that lack the formality of a footway. Illegal and unsafe parking (e.g. parking too close to a junction) is frequently observed. Parking and loading is vital for businesses, however often is not required on evenings and weekends, opening up possibilities.



**Lack of cycle parking**

Lack of cycle parking provision along the Low Line is a particular issue to address, and is particularly prevalent in areas east of London Bridge station. Key destinations such as Maltby St Market + Ropewalk, and Spa Terminus have a severe lack of cycle parking, with visitors resorting to ad hoc cycle parking, or simply staying with their bikes.



**Poor cycle accessibility**

While the Low Line takes in key cycle routes including Quietway 14, a lack of cycle contra-flows on some one-way streets limits cycle accessibility to destinations along the Low Line, and limits links with the wider cycle network.



**Missing crossing points at barrier streets**

Crossing key barrier streets is essential to creating a continuous, connected and safe Low Line route. Pedestrian and cycle crossing points are missing or poorly located on key desire lines both for visitors to the Low Line, and local communities.



**Missing informal crossing points**

There are many instances of missing informal crossings along the Low Line. These pose a barrier to movement for some groups of people and fail to provide a continuous, connected route.

# Section 4: The Low Line Route

This section sets out the Low Line walking and cycling routes based upon the baseline analysis and route selection criteria set out in sections 1 and 2. While providing a core walking route, a series of complementary routes are also proposed. Together, these help to encourage exploration of the Low Line area and provide better inclusivity, recognising the array of businesses, activity and points of interest peppered throughout the local Low Line area.

# Proposed walking route(s)

The proposed Low Line route weaves in and out of the viaduct, linking up with an improved local street network. A main route is suggested, being direct, public and open. It is complemented by supplementary routes to encourage exploration, private routes which may not always be open, and future routes that can open over time.

The proposed Low Line walking route, shown in the plan below, comprises 3 different components.

## Main walking route

The main walking route is accessible 24/7 and comprises of mostly public highway routes, and some private (but open) routes including Ewer Street (Network Rail owned) and Lucey Way (LB Southwark housing land).

## Supplementary routes

The supplementary routes are additional or alternative routes that encourage people to wander and explore the Low Line area. These are also fully accessible 24/7.

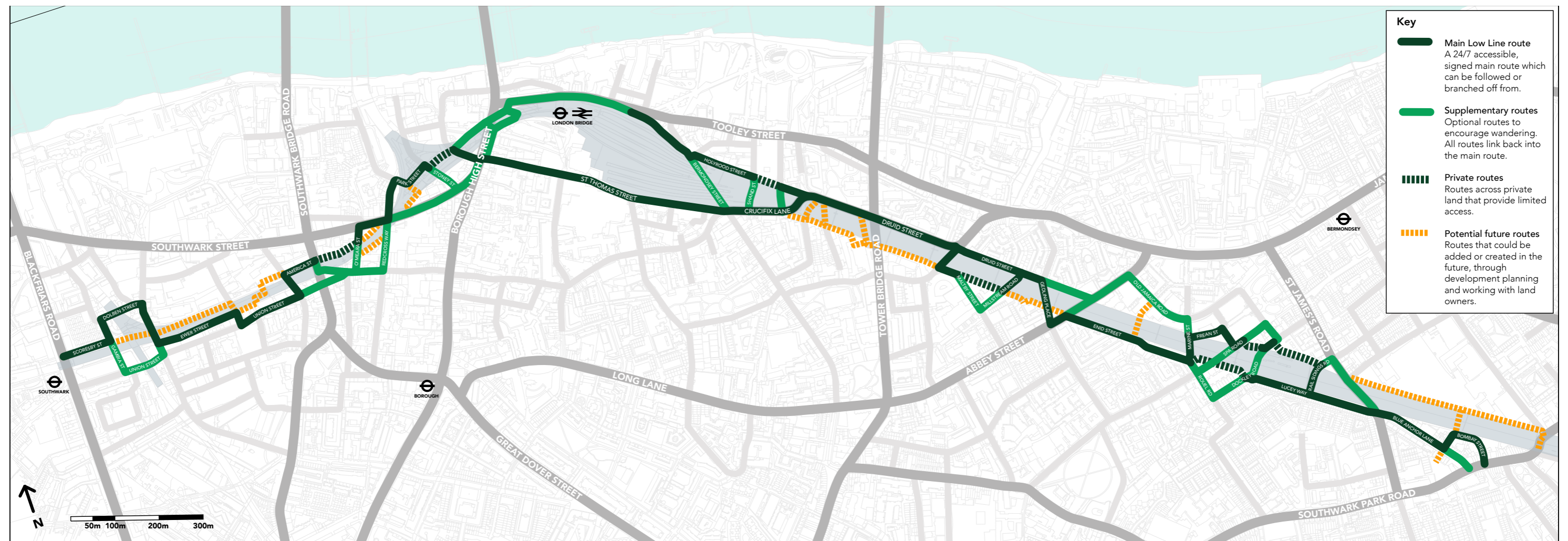
## Private routes

Many active and interesting points along the Low Line are within privately owned and managed spaces. The private routes encourage people to wander and explore the Low Line, and help to support localised business hubs.

## Potential future routes

These routes highlight potential future opportunities to open up more parts of the Low Line to the public, creating private spaces with public access, routes through

the viaduct structure that could be delivered as part of comprehensive development projects.



# Proposed cycle route(s)

The proposed Low Line cycle routes are shown on the map below. While Quietway 14 already covers the Bankside/Southwark end of the Low Line, proposals include extensions to this, to provide better cycle access to the eastern end (Bermondsey) where currently there is little provision.

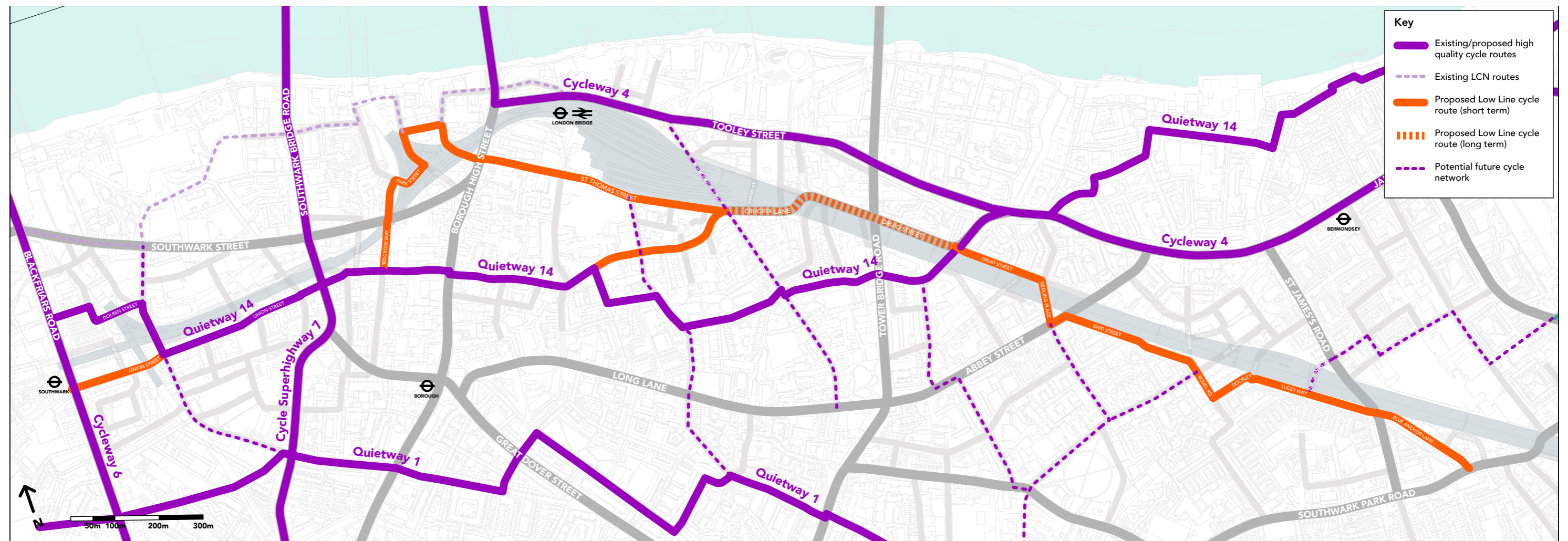
## Short term cycle routes

Routes can be delivered through relatively simple measures including introducing cycle contra-flows on one-way streets. This includes Snowsfields, St Thomas Street and Bermondsey Street (south). The route to the east, taking in Druid St (east), Enid St and Lucey Way provides a vital and deliverable Low Line cycle link, connecting between The Blue Market in Bermondsey and

Quietway 14 at the Druid St/Tanner St junction.

## Long term cycle routes

In the longer term, cycle routes could be delivered on Druid St/Crucifix Lane. This more complex cycle scheme would require segregated cycle provision due to the high traffic volumes, as well as addressing junctions and signals. As TLRN streets, these provide a more strategic traffic role and the delivery process would likely take longer than other routes.



# Section 5: Design approaches

In this section, we explore a range of design approaches and key interventions that should be employed to deliver the Low Line walking and cycling routes. These are framed around 3 key strategies: space for people; accessibility and infrastructure; and placemaking and wayfinding.

# Space for people

The first design approach is focussed on rebalancing the street space to better provide for walking, cycling and public life.

Often the most space within streets is given to vehicles despite policy aims to prioritise people walking, cycling and wheeling. The Low Line route is both a key part of the walking and cycling network within the wider area, but also a destination in its own right. Providing space to not only support walking, cycling and wheeling, but also to provide a stage for public life, activity and placemaking is key to developing the Low Line as a destination.

## Pedestrian priority streets

The following proposals are designed to tackle walking and cycling accessibility in highly constrained but low-traffic streets. These are mostly of the 'quiet criss-cross street' condition, where there is not sufficient space for footways whilst retaining vehicle access. Here, an approach to create pedestrian priority streets is most suitable to the environment. This approach involves re-prioritising road users and encouraging sharing of the space available. Changing the feel and look of the street environment can be enough to encourage people to walk in the carriageway, and to signal to drivers that pedestrians and cyclists have priority.



*Low tech approach: this example of a school street demonstrates how paint or thermoplastic can be used to create a different surface that indicates that everyone can share the space and pedestrians should be given priority.*

A permanent approach to creating pedestrian priority streets involves raising the carriageway surface to footway level, and introducing a paved surface. Although the space is shared, where there is no kerb upstand tactile edging should be used to delineate a traffic-free zone in place of the footway. This aids people who are blind or visually impaired to understand where a shared surface begins and ends and provides reassurance.

A low cost and low tech approach could utilise paint or thermoplastic to create a patterned surface within the carriageway. Imaginative planting (vertical or overhead for example) also creates a softer feel to the street, delivering against the Healthy Streets criteria. Existing footways are retained in their current condition, though repairs and defects may be addressed.



*Permanent scheme: Columbia Road in London. The carriageway surface has been raised, leaving only a slight upstand to the footway. The centre of the carriageway has been paved using setts, leaving a smooth concrete block paving on either side to enable cycling.*

## Flexible footway space

A flexible approach to parking and loading space would help to use space more efficiently, adapting to the differing demands at different times of the day and week. Space for parking and loading during the week could for instance, become space for outdoor seating and dining at the weekend and in the evening. This could be done formally or informally, simply placing tables and chairs in loading bays at the weekend, or creating loading pads on the footway for a more permanent solution.



*Loading pads: New Bond Street in London created flexible space that provides a significant increase in footway space, whilst also providing space for vehicle loading when needed to support the needs of retailers and businesses.*

# Space for people cont.

## Footway creation

Several streets along the Low Line lack footway provision alongside the railway arches. Introducing designated space for walking will improve road safety and accessibility for people walking.

Hercules Road (shown below) shows how a footway can be introduced alongside railway arches using robust paving and incorporating tree planting.

Alternatively, the image to the right of this shows how a footway space can be defined using low tech means such as paint and street furniture. This provides an opportunity to introduce low cost solutions to improve road safety,

as well as the ability to adapt and test different design solutions.

It is vital to consider how pedestrian space would be protected if using low tech solutions, as well as the usability for people with disabilities if implemented as a long term measure.

## Footway widening

COVID-19 physical distancing, as well as an expected increase in visitor numbers in the long term to the Low Line, means investment in footway widening is vital to support people walking and ensure a good level of accessibility. Whilst permanent footway widening is preferred, short term measures could include using temporary low-cost materials, street furniture or paint to redefine footway space.

Grabbing back excess 'baggy' space from the carriageway, and adopting a flexible approach to space at different times of day will create a public realm and street that better supports people and businesses.



Image: Hercules Road in LB Lambeth, London. Despite the lack of a full height kerb, tree planting and surface treatments help to organise the space, defining a formal footway. The scheme has provided a highquality, safe and accessible pedestrian environment whilst supporting business needs associated with the railway arches, and creating an attractive streetscene.



**More space for planting:** temporary footway widening on The Cut creates more space for pedestrians and planting. Where possible, more permanent solutions should be employed.



**A canvas for communities:** the image above of a pavement extension at a bus stop in Brixton town centre shows how the local community have engaged positively with the newly created space.



# Space for people cont.

## Pocket parks

The Low Line area provides a series of unique public space opportunities, utilising tunnels, undercroft spaces, yards and excess carriageway space in areas of existing or potential activity. These present an opportunity to support existing businesses, to help activate vacant arches or to support communities. Projects could create spaces anchored by businesses, providing space for spill-out or al fresco dining for example; or creating and enlivening a space through imaginative design and programming.

**Low Line schemes:** Hop Kingdom forecourt, Rail Sidings Road (underbridge), Holyrood St, America St, Ewer St

Flexible, temporary and low-cost approaches such as those employed in New York City can help to test designs, speed up and increase delivery.

In other cases, permanent streetscape improvements could be employed to organise and define spaces, and improve the attractiveness of the Low Line streetscape, complementing the architectural character of the area.



Source: nyc.gov

**Repurposing space for vehicles:** Before and after showing the Pearl Street Triangle + Ninth Avenue/Fourteenth St in New York City. The Plaza Programme (around 2007 onwards) created tens of new public plazas around New York City using low tech and low cost solutions such as paint, planters and parasols to take back space for people walking, cycling and socialising.



Source: In Your State

**Interactive spaces:** The Swing Park in Milwaukee, USA created an exciting and highly interactive public space in an unexpected place- under the North Holton Street freeway. While the space suffered from a lack of active frontage and natural surveillance, it was well-loved and used by the local community and made use of an otherwise forgotten space.

## Junctions for people

People walking and cycling should be able to safely and comfortably cross key 'barriers streets' in order to create a seamless, continuous route and to draw people along the full length of the Low Line. However, despite pedestrians and cyclists outnumbering vehicles in some instances, the environment and type of junction is vehicle-focussed. Further, planned measures to reduce traffic volume in some areas also present an opportunity to address junctions, considering them as public spaces and vital walking and cycling infrastructure.

The Low Line should adopt approaches such as that used at Leonards Circus (below) that prioritise walking and cycling and enhance these intersections as public spaces.

**Low Line schemes:** Union St/Great Suffolk St + Crucifix Lane/St Thomas St/Bermondsey St/Snowsfields



**Shared space junction:** Leonard Circus in London replaced an existing junction with a shared public square that better supports public life, walking and cycling. Pedestrian priority spaces should be carefully designed to ensure the needs of people with disabilities can be met.

## Corridor improvements

Crucifix Lane/Druid Street is a key corridor connecting between the hubs of activity around London Bridge area and the Bermondsey area. Currently, the hostility of the street and lack of footway in some areas creates significant severance between these two hubs of activity, and threatens the success of the Low Line in creating a continuous high quality walking and cycling route, and encouraging people to move along it.

Crucifix Lane/Druid Street will become a high quality walking and cycling corridor, reducing the excess carriageway space and giving it back to people. Low cost, low tech solutions could include using planters to designate space for cycling, such as those employed on Royal College Street in London. More permanent solutions could include introducing in-ground planting beds or constructing a formal footway.

**Low Line schemes:** Crucifix Lane/Druid St



**Light segregation:** Royal College Street in London shows how planters and street furniture can be used to provide protected space for cycling, reducing the need for more costly kerb works.

# Accessibility + infrastructure

The second approach focusses on ensuring the Low Line is accessible to all through addressing the quality and availability of walking and cycling infrastructure.

In many cases interventions are simple and low cost basic improvements to streets that can make the difference between an area of the Low Line being accessible to everyone or not. This strategy focusses on the basic building blocks of walking and cycling infrastructure from provision of cycle parking, to suitable crossing facilities, to footway provision.

These interventions can be applied throughout the Low Line area.

## Footway improvements

The following footway proposals set out a programme of basic accessibility improvements to the footways throughout the Low Line. These improvements are required to support walking in the area and should ensure that all streets are accessible.

### Vehicle crossovers

Poor quality or redundant vehicle access points along the Low Line should be addressed, upgrading to the standards set out in the Southwark Streetscape Design Manual (May 2020). This guidance provides standard detail drawings for vehicle crossovers. In principle, the ramp should be kept to a minimum depth so as to maintain a flat, level footway surface of a generous width.

### Footway defects + surfacing

A programme of resurfacing footways, or addressing minor localised defects will improve pedestrian accessibility, and create a higher quality public realm. Footways should be resurfaced in materials appropriate to their surroundings, or to match the existing surrounding surface where individual defects are being rectified.

**Low Line schemes:** Dolby Street, Scoresby Street, Gambia Street, Druid Street, Blue Anchor Lane.



A good example of a footway crossover on Great Guildford Street on the Low Line, in this case for bin access.

## Informal crossings

Additional crossing points are needed throughout the Low Line. This includes improving provision and safety to enable people to cross key barrier streets on pedestrian desire lines. While formal crossings are generally preferred, the complexities and challenges of introducing new crossings on TLRN streets, near to existing crossings, or near to existing junctions or bridges mean informal crossings may be more appropriate and deliverable.

**Low Line schemes:** Abbey Street, St James's Road, Southwark Bridge Road, Southwark Street, Bermondsey Street, Druid Street.



An example of an informal crossing prioritising pedestrians.

## Formal crossings

Formal crossings are more complex to deliver, particularly when close to or part of a signalised junction, or on the TLRN where an understanding of the traffic impacts would be required. However, there are several instances where formal crossings could be implemented relatively promptly. Where possible, formal crossings across key barrier streets should be implemented. Streets should be easy and safe to cross, providing appropriate crossing facilities on pedestrian/cycle desire lines. This is particularly challenging when dark tunnels and bends reduce visibility. Several new crossings have been identified throughout the Low Line area.



Colourful crossings help to highlight crossing points as well as providing spaces for artistic and creative projects. Coloured crossings could also help with wayfinding by highlighting the Low Line route.

# Accessibility + infrastructure cont.

## Side road crossings

Side roads junctions across the Low Line vary in quality. While some included raised entry treatments, there were no continuous footway treatments, and some junctions lacked basic provision, or had deteriorated over time. Upgrades to side road junctions improves accessibility by providing dropped kerbs or flush surfaces, and the appropriate tactile paving. Some approaches such as continuous footways can also prioritise pedestrian movement. Well-designed side road entries can also improve road safety. Side road junctions also often provide opportunities for introducing trees, SuDS and greening.



A continuous footway treatment in Clapham prioritises pedestrians over vehicles.

## New seating areas

A lack of seating opportunities is a key issue throughout the Low Line and hinders accessibility for people who need places to stop and rest regularly. Seating also provides an opportunity for public life, and supports activity and businesses. Seating can also be an opportunity to create interesting features, such as the below example on the South Bank in London. New seating areas are proposed in several locations, including to support activity and businesses, and to provide regular rest points along the Low Line.



A mix of functional seating with backrests and arm supports as well as fun, creative approaches such as this example at South Bank, London, can improve accessibility and help develop the Low Line brand and identity.

## Barrier removal and gateway opening

The removal of several existing barriers along the Low Line would vastly improve accessibility in a quick and low cost way. A small amount of surface works may be required to create a flush and smooth walking surface across these former thresholds in some instances.

**Low Line schemes:** Holyrood Street, Southwark Council Offices, Lucey Way



Attractive gateway treatment at Gibbon's Rent in the Holyrood Street area of the Low Line.

## Decluttering

The presence of industrial bins is an issue throughout the Low Line, and often these obstruct footways. These are large items, and restrict footway width significantly, posing a barrier to all pedestrians, and particularly vulnerable users. Simple measures to provide designated spaces on-street for bin storage in spaces off the footway, or in areas where disruption is minimal, would increase the available footway space for walking.

## Lighting

Lighting within the tunnels across the Low Line should be reviewed and upgraded, particularly where new crossing points are proposed.

**Low Line schemes:** underbridges throughout

## Cycle accessibility

Streets throughout the Low Line area should be easily accessible by bike, in order to deliver a comprehensive cycle network and routes aiding people travelling through the area, and to improve access by bike to the businesses and activities along the Low Line. Contra-flow cycling will be enabled on one-way streets that currently do not provide it.

**Low Line schemes:** Snowsfields, Bermondsey St, St Thomas St, Redcross Way

## Cycle parking

There is a significant lack of cycle parking along the Low Line, particularly towards the eastern end around Druid Street, Maltby Street, Enid Street and around Spa Terminus. Providing public on-street cycle parking in these locations would enable more people to cycle.

**Low Line schemes:** Key destinations throughout.



Covered cycle parking provides better provision for cyclists and opportunities for green roofs.

# Placemaking + wayfinding

The final approach concerns the identity of the Low Line and building on the creative and placemaking projects already in place to embed this throughout the Low Line area.

Projects such as the Skip Garden on America Street bring a sense of surprise, fun and excitement and can help to stimulate activity and life in unloved spaces, or support and enrich public life in more active areas. Such projects also create a unique brand for the Low Line, providing unexpected and eye-catching moments that can help to guide people along the route, aiding wayfinding but retaining a sense of exploration and discovery.

The following approaches support the development and delivery of more of these projects.

## Access + threshold treatments

Helping people to find their way along the Low Line is vital to support businesses and activity in the area. The Low Line route includes many decision points, and sometimes key spaces can appear hidden or closed. Improving visual and physical accessibility in some areas will help to create a more legible and coherent route along the Low Line. Key places such as Spa Terminus and Holyrood Street would benefit from access and threshold treatments.

**Low Line schemes:** Ewer Street, Holyrood Street, Southwark Council Offices, Spa Terminus



The entry treatment to Ropewalk shows how other gateways and thresholds could be treated along the Low Line.

## Creative projects

Several projects along the Low Line have created interesting and eye-catching waymarkers, that help to draw people to streets they may have otherwise overlooked or felt deterred from. The America Street skip garden provides an excellent example of this.

The Low Line approach further builds on this intuitive approach to wayfinding to introduce a further series of creative projects rooted in the identity of the area. These could include interactive objects, interesting greenery, lighting features, or graphical work, playing with the architecture of the railway, or responding to the local identity, culture or history or responding imaginatively to a particular need or issue (e.g. rainwater management).

These projects will be located at key decision points and gateways along the Low Line route, and will create a unique and intuitive wayfinding system rooted in the identity of the area, providing visual cues to guide people through the area and create a sense of exploration.



Source: Portugalist  
Image: umberellas in Agueda, Portugal

## Imaginative greening

Greening is a key need throughout the Low Line, as identified and explored in the Low Line Commons greening strategy. However some environments are significantly constrained. Interesting and imaginative approaches to green infrastructure will both provide benefits to the streetscene, air quality, biodiversity and sustainable drainage. However these projects also have the potential to provide points of interest to catch the eye and encourage movement and exploration along the Low Line.



Source: Urban Green Blue Grids  
Image: American Institute of Architects.

# Proposed wayfinding projects

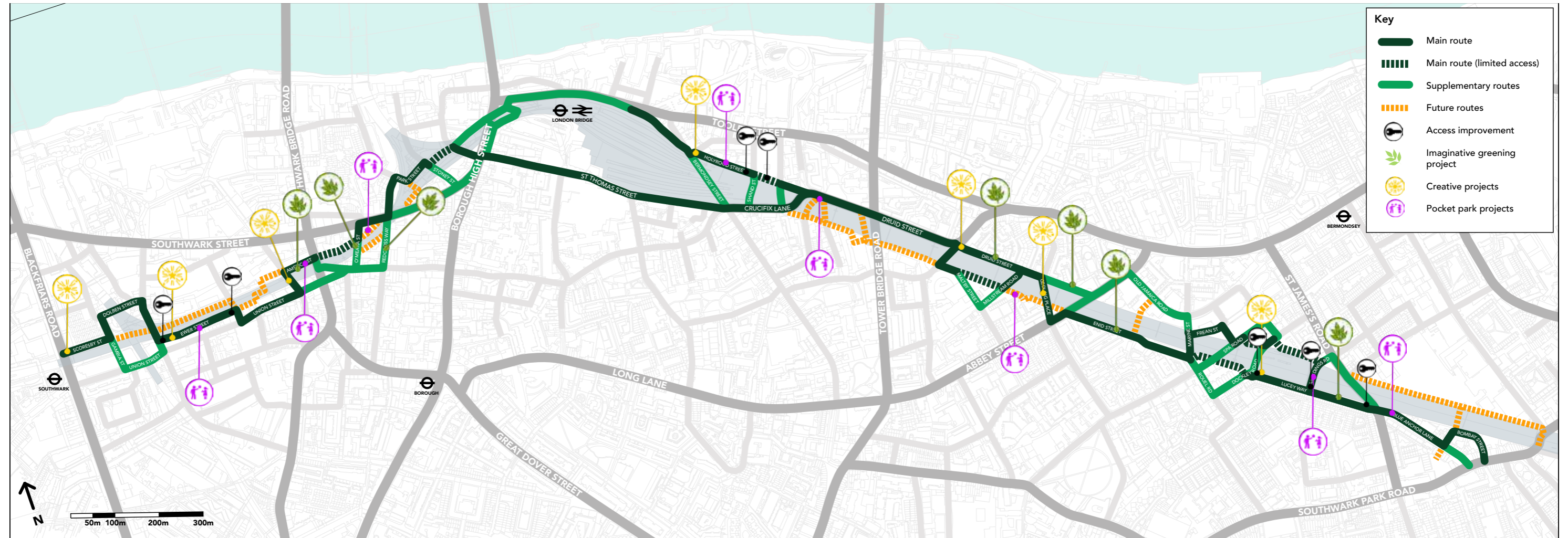
Ensuring people can find their way along the Low Line is key to the success of the route.

The Low Line is a place to be explored and wayfinding should encourage the sense of discovery and exploration.

The railway line is a distinctive and impressive architectural feature that provides a constant confirmatory reminder to visitors that they are on the Low Line. Additionally, there is a wealth of interesting objects and features placed along the Low Line, from public art, interesting greening features (such as the Skip Garden, intriguing street furniture (such as the Flat Iron Sq benches) and major landmarks such as The Shard.

However, in order to provide guidance and draw people to the key spaces and areas of the Low Line, a series of creative projects are proposed. These build on the existing projects along the Low Line, and should be rooted in the identity, culture and history of the area.

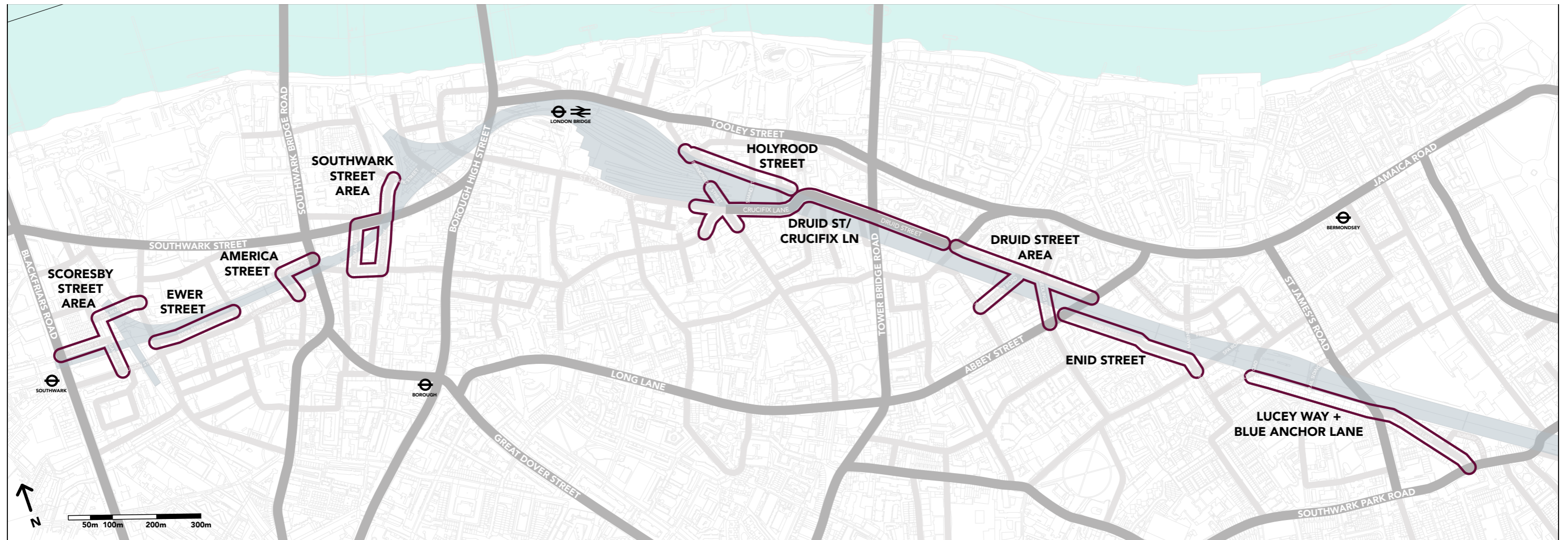
Suggestions are shown in the map below.



# Proposed walking environment improvements

The plan below shows the key focus areas for improvements to the streets and public realm, based on the baseline analysis, street conditions and their importance for the Low Line route.

Some of these are explored further in the following section.



# Proposed cycling improvements

## Cycle contraflow

Streets throughout the Low Line area should be easily accessible by bike, in order to deliver a comprehensive cycle network and routes aiding people travelling through the area, and to improve access by bike to the businesses and activities along the Low Line. However one-way streets that lack contra-flow cycling hinder access and prevent cycle routes from forming. Many one-way streets in the area have low traffic levels, and as such are considered suitable for contra-flow cycling. Contra-flow cycling will therefore be enabled on one-way streets that currently do not provide it, both along the Low Line cycle routes, and on the adjoining streets used to access the Low Line.

**Low Line schemes:** Ewer Street, Redcross Way (north), Ayres Street, Bedale Street, Snowsfields, St Thomas Street, Shand Street, Freatn Street + Lucey Way (permitting cycle access).

NB: cycle contraflow on Crucifix Lane and Druid Street (west) should be provided as part of a corridor improvement scheme to create segregated cycle tracks.

## Cycle parking

Providing cycle parking would vastly improve access to businesses by bike. Currently there is a severe shortage of cycle parking, in particular towards Bermondsey.

Locations for new cycle parking are shown below. Cycle parking should utilise existing carriageway space where possible, in order to minimise impacts on the pedestrian environment.

## Crossing points + minor junction upgrades

Providing new cycle crossing points, and implementing minor upgrades to junctions throughout the area will improve road safety and encourage greater uptake of cycling, in line with LB Southwark transport policies. This could include providing islands to provide protected spaces to wait and better enabling right-turns at priority junctions.

## Signalised junction upgrades

Improving signalised junctions in the short term is vital in some places to enable contra-flow cycling and form the Low Line route. Key interventions include providing a cycle crossing phase exiting Bedale Street at the existing signalised junction.

The junction of Crucifix Lane, St Thomas Street and Bermondsey Street should also be prioritised for short term upgrades. This could include de-signalising the junction in light of new LB Southwark proposals that should reduce vehicle traffic passing through the junction on the Bermondsey Street arm.



**Key**

- Existing/proposed high quality cycle routes
- - - Existing LCN routes
- Proposed Low Line cycle route (short term)
- - - Proposed Low Line cycle route (long term)
- - - Potential future cycle network
- >>>> New cycle contra-flow
- P New cycle parking
- New/upgraded crossings + minor junctions
- ◻ Junction signal upgrades
- Segregated cycle tracks
- Junction upgrades

# Section 6: Design proposals

The following section sets out street and public space design proposals for some of the the key opportunity points along the Low Line route.



# Scheme 1: Scoresby Street

Scoresby Street is at the very start of the Low Line route to the west, sited off Blackfriars Road. The street lies in a busy central location in close proximity to Palestra, Transport for London's offices and Southwark tube station. Despite this, the street's public realm follows a row of active railway arches along the southern side, and back fences of low rise housing on the northern side.

## Key issues and challenges

- Limited footway width on the southern, active side of the street provides a poor level of accessibility;
- Poor quality concrete footway surface on the southern footway provides a low quality public realm and streetscape. The northern footway has been paved with yorkstone.
- Severe pinch points on the corner with Gambia Street, and very poor quality surfaces with severe defects and trip hazards.
- The need to enable loading alongside the arch units, whilst providing more generous footways and retaining residential permit parking on the northern side.
- Lack of trees and greenery within Scoresby Street, though an opportunity to link in with the pocket park at Gambia Street.
- Poor pedestrian environment along Gambia Street due to the design of the servicing access to Palestra. Poor surface material choice and limited footway width caused by hostile vehicle mitigation measures.

## Proposals

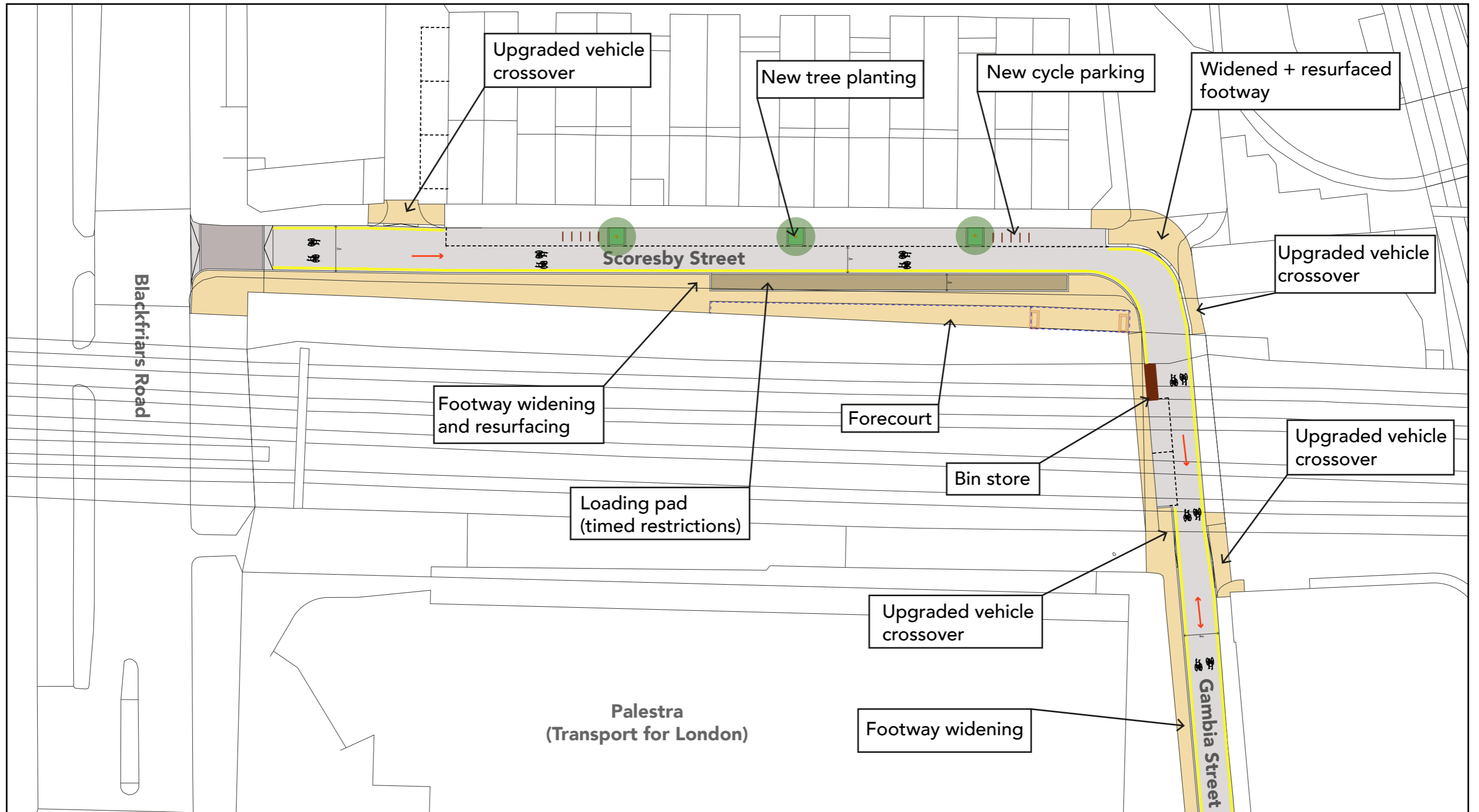
Key proposals are as follows:

- Introduce one-way eastbound restrictions with cycle contraflow on Scoresby Street, in order to reduce the space required by vehicles and reduce the volume of traffic using Scoresby Street.
- Widen the southern footway to reduce the carriageway width to 3m. Resurface the footway and private forecourts in yorkstone paving to tie in with paving on the northern side.
- The widened footway should incorporate a loading pad to enable vehicles to load outside business units.
- Relocation of parking bays from the east to the west side of Gambia Street under the railway arch, in order to enable vehicles to turn the corner from Scoresby Street into Gambia Street. Introduction

of a bin storage structure to discourage storing of commercial bins on the footway.

- Widen footway with continuous dropped kerb on west side of Gambia Street outside the Palestra servicing entrance. Reduce carriageway to 3m in width. Retain two-way traffic flow to ensure Palestra-bound traffic is not required to use Scoresby Street.
- Upgrade vehicle crossover on north side of Scoresby Street to a raised continuous footway treatment (see LB Southwark guidance) to address inaccessibility.
- Introduce tree pits and tree planting to break up parking bays on north side of Scoresby Street. Lost parking bays could be relocated within the private housing estate access road north of Scoresby Street, as indicated.
- Introduce cycle parking within area of parking bays on north side of Scoresby Street.
- Upgrade footway surface on the north east corner of Gambia Street (outside the existing pocket park) to ensure a smooth, level surface and improve accessibility.





# Scheme 2: America Street

America Street lies within the Bankside area of the Low Line, and lies on a vital Low Line connection between the Union Street area west of Southwark Bridge Road, and the various points of interest and activity east of Southwark Bridge Road including Flat Iron Square, and new development sites including Southwark Square. Southwark Bridge Road is the first key barrier street encountered along the Low Line, and addressing how people cross this street via America Street is a key challenge. There is currently a lack of activity within the section of Low Line between Ewer Street and Southwark Bridge Road, and schemes which create interest and help to reinforce the Low Line route from a wayfinding perspective would help to better knit together and program the route.

The street is currently lined by America House on the north side which is occupied by several creative consultancies and apartments; and 4 railway arch units on the south side, occupied by vehicle repair garages and a public car park. As part of LB Southwark's Covid-19 street improvement measures, the street has been made access-only by introducing a modal filter with flexible bollards at the junction with Southwark Bridge Road.

## Key issues and opportunities

- Future plans for the refurbishment of the railway arches could introduce a new mix of businesses to America Street.
- The recently introduced modal filter has provided an opportunity to reconsider the streetscape along America Street.
- America Street lies on a key Low Line connection and missing link across Southwark Bridge Road. Introducing a new crossing point here is therefore a key aim for this scheme.
- Footway width along America Street is severely limited, and the quality is poor, with degrading concrete surfacing and inaccessible vehicle crossovers with no dropped kerbs or level surfacing. Despite this, the reduction in vehicle traffic present an opportunity to encourage people to walk in the carriageway, as widening of footways could prove costly.
- Retaining vehicle access to the existing businesses is vital.
- The street currently lacks planting and greenery, aside from the Skip Garden. Introducing more

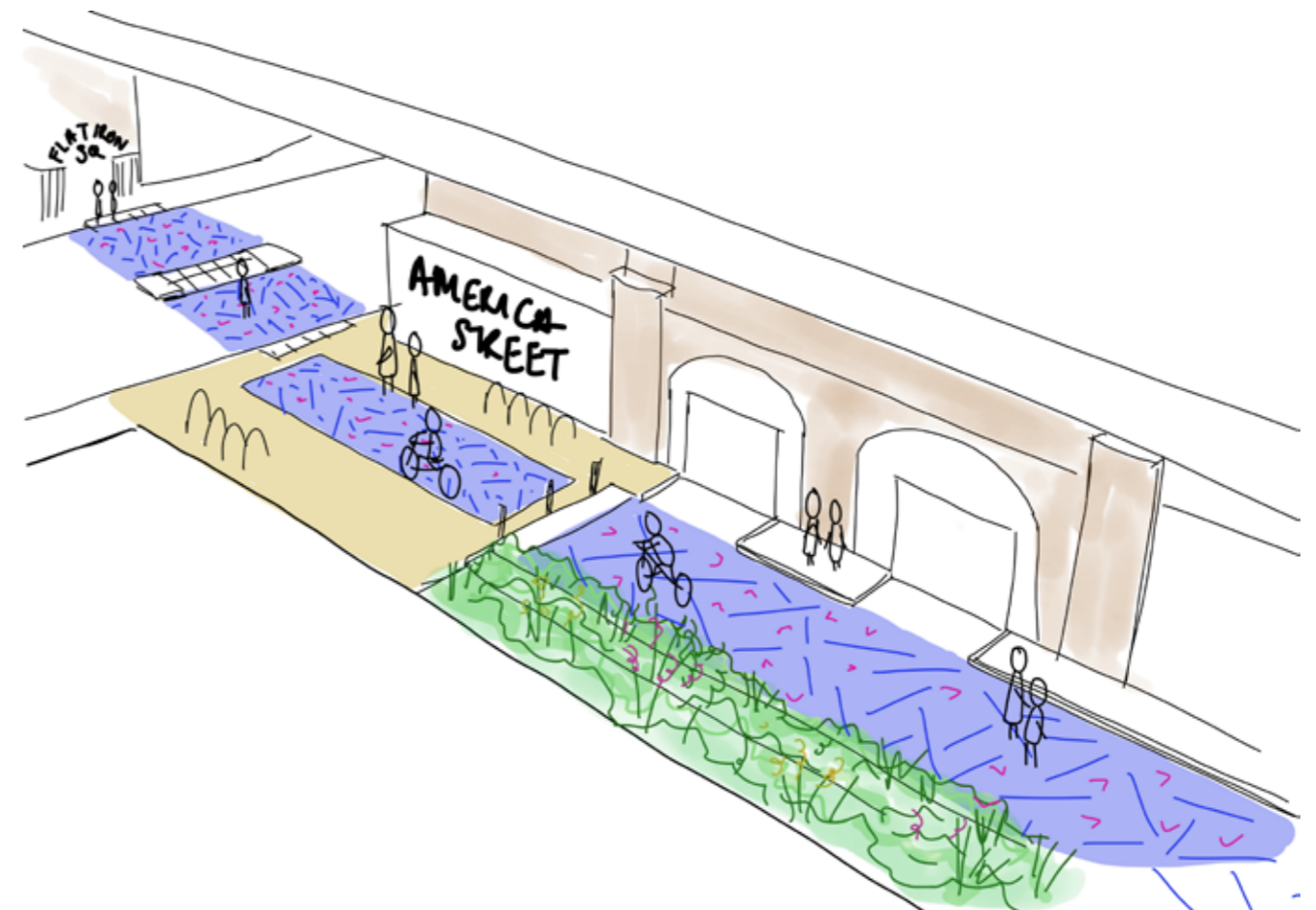
greenery within the street through schemes like this would help to reinforce it's role as a part of the Low Line route and improve connectivity and road safety.

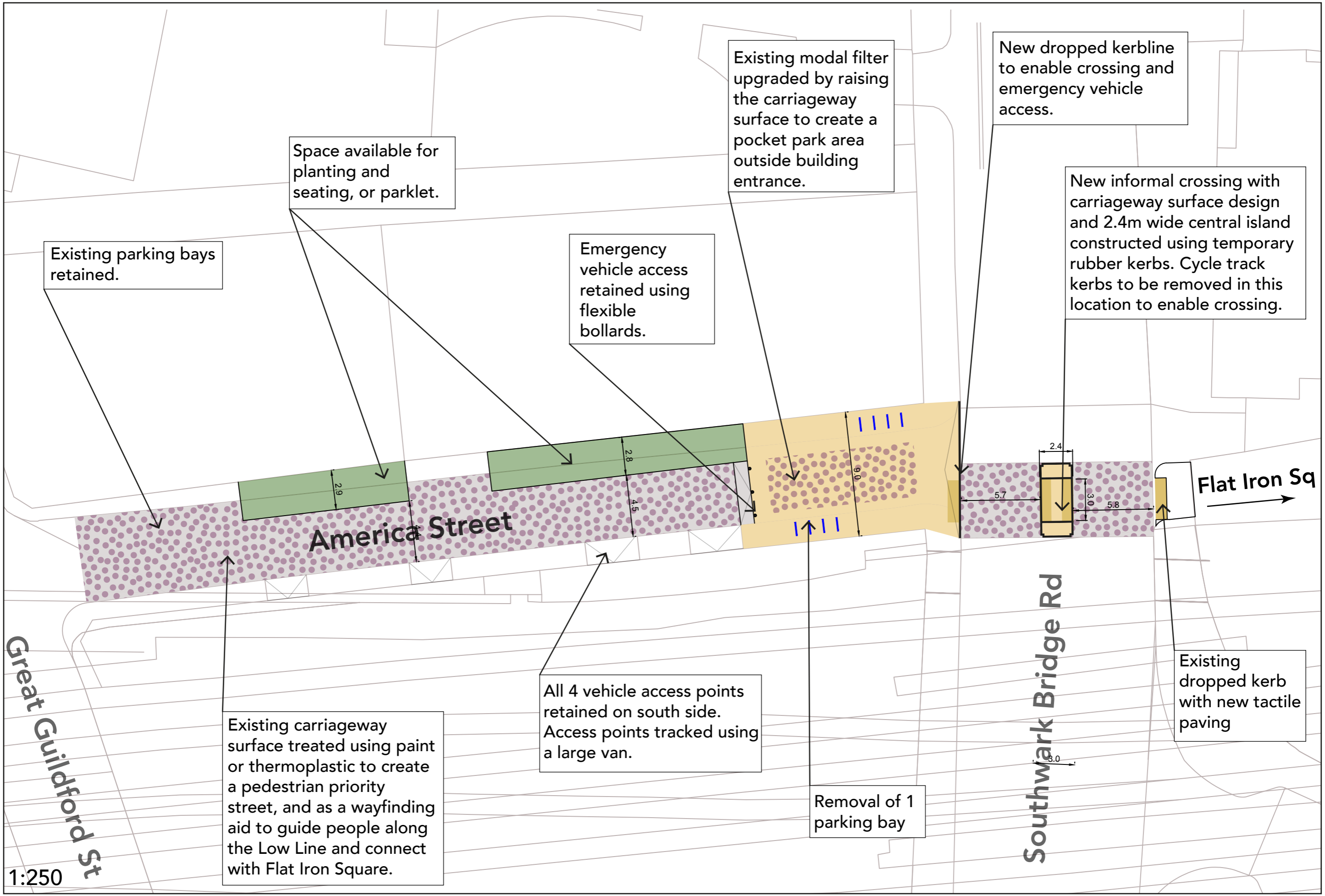
- The current modal filter retains emergency vehicle access, and this should also be retained in any schemes going forward, as per agreements between LB Southwark and the emergency services.

## Proposals

The proposals include creating a pedestrian priority street along America Street, introducing a new pocket park and street greening, and providing a new informal crossing of Southwark Bridge Road. These are described in more detail below:

- Introduction of a raised carriageway and pocket park at the Southwark Bridge Road junction, including removal of 1 parking bay. This space aligns with an existing entrance point into the America House building, and would provide a point of interest along the route, helping to guide people along it. The existing flexible bollards are retained but relocated to enable emergency vehicle access. Raising the carriageway surface helps to visually reinforce the modal filter, provide a level crossing over America Street, and is essential to deliver other measures described below.
- Introduction of an informal crossing point with a 2.4m wide refuge island on Southwark Bridge Road. The crossing is off-centre of the America Street junction to enable emergency vehicle access in/out of America Street. The crossing therefore straddles the existing footway and carriageway at the junction, necessitating the raising of the carriageway. The crossing directly aligns with the Flat Iron Square entrance- a private 'yard' and key Low Line attraction.
- Narrowing the carriageway along America Street to 4.5m to make space for planting areas, whilst ensuring vehicle access to the business units remains possible. Tracking was carried out using a large van.
- Introduction of a surface decoration of America Street and the crossing of Southwark Bridge Road using paint or thermoplastic. This will act both as a wayfinding aid, and inject a sense of the Low Line character and identity into an otherwise inactive street.
- Parking bays are retained at the western end of America Street, with one bay being removed to create the pocket park to the east.





Existing parking bays retained.

Space available for planting and seating, or parklet.

Emergency vehicle access retained using flexible bollards.

Existing modal filter upgraded by raising the carriageway surface to create a pocket park area outside building entrance.

New dropped kerbline to enable crossing and emergency vehicle access.

New informal crossing with carriageway surface design and 2.4m wide central island constructed using temporary rubber kerbs. Cycle track kerbs to be removed in this location to enable crossing.

Existing dropped kerb with new tactile paving

All 4 vehicle access points retained on south side. Access points tracked using a large van.

Removal of 1 parking bay

Existing carriageway surface treated using paint or thermoplastic to create a pedestrian priority street, and as a wayfinding aid to guide people along the Low Line and connect with Flat Iron Square.

Great Guildford St  
1:250

America Street

Southwark Bridge Rd

Flat Iron Sq

# Scheme 3: Southwark Street area

The Southwark Street area lies within the Better Bankside BID area and is a key gateway to Borough Market, one of the busiest areas and visitor attractions along the Low Line. Flat Iron Square provides another key Low Line attraction, and development sites alongside Southwark Street also provide opportunities for future activity in the area.

The Low Line route here becomes more difficult to follow using streets or the public highway, as the line bends around towards the River Thames and streets no longer follow or run parallel to the line. The Low Line walking route runs through Flat Iron Square and through the planned Southwark Square site, following the line of the railway through private yards open to the public.

Southwark Street is a key barrier to cross for pedestrians and cyclists and there are no crossing facilities provided. O'Meara Street and Redcross Way are historic streets crossing the Low Line. These are very narrow in character with little space for generous footways and carriageway. Despite this, these streets carry very low levels of traffic and people can often be seen walking within the carriageway.

## Key issues and opportunities

- Future plans for development sites along Southwark Street provide opportunities for future activity.
- The area provides a poor gateway to Borough Market and lacks legibility for people trying to get to the market, or indeed follow the Low Line.
- The Low Line becomes challenging to follow as streets no longer follow the railway line and pedestrians must go through private yards such as Flat Iron Square.
- Southwark Street presents a key barrier to pedestrian and cycle movement and there is no crossing facility provided on the key desire line at Redcross Way.
- Redcross Way and O'Meara Street are very narrow, historic streets and provide an interesting opportunity to consider how best to approach these.
- The street environment of Redcross Way is extremely poor, with narrow, defected footways, missing dropped kerbs and low quality surfacing.

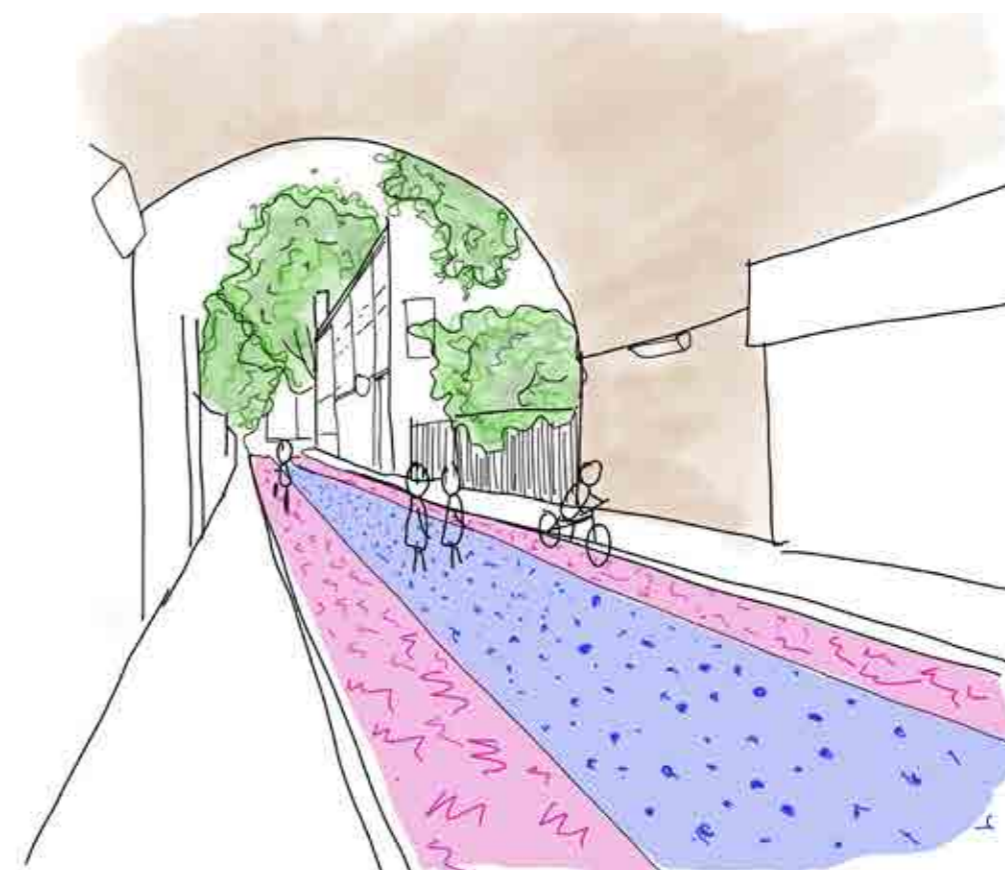
## Proposals

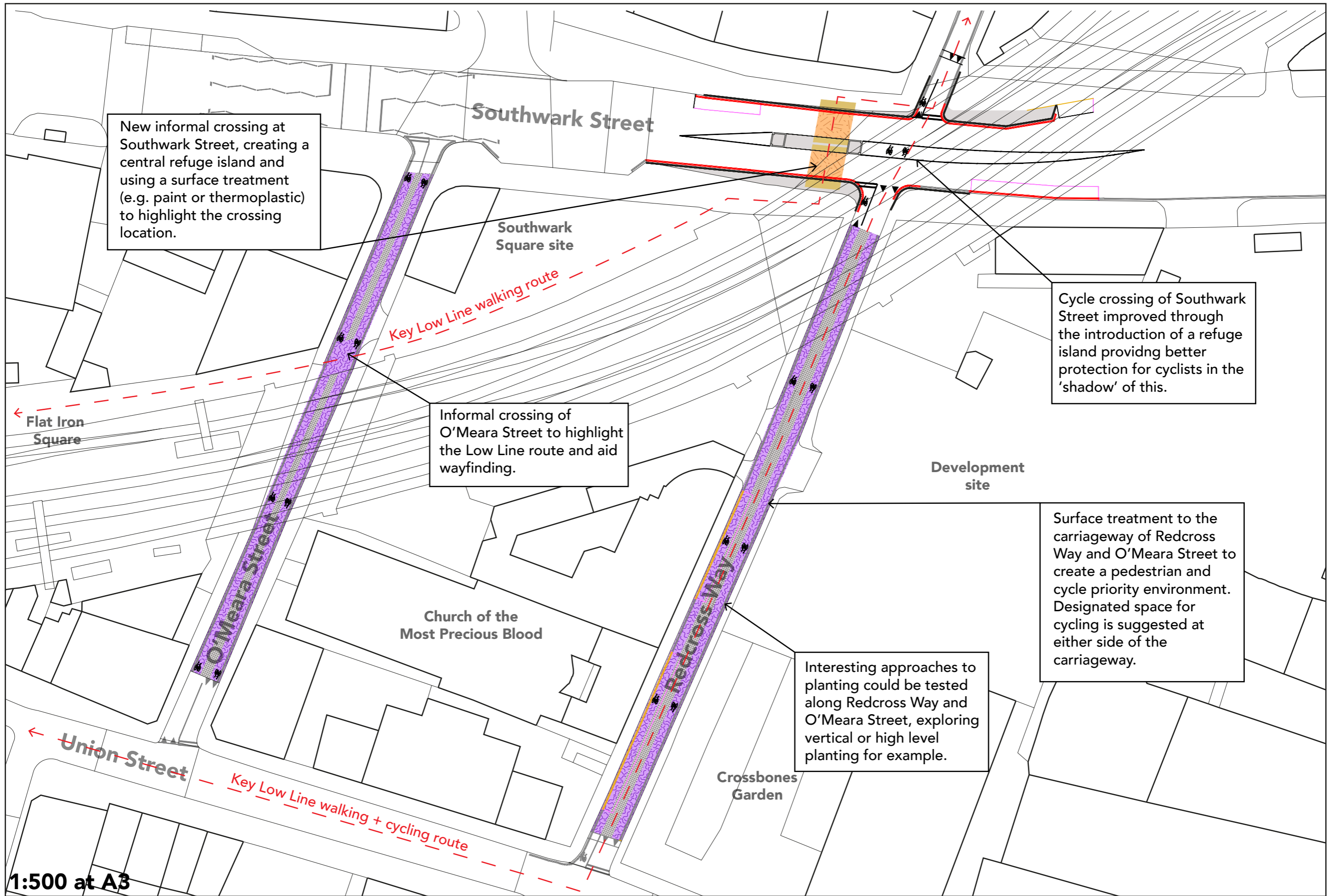
The proposals include:

- Introduction of an informal crossing on Southwark Street, west of the Redcross Way junctions. This provides a central refuge island to aid safe crossing, and a coloured surface treatment to highlight the crossing point. This provides a crossing on the desire line for pedestrians coming from Southwark Square or from Redcross Way. It also enables safer cycle crossing in the shadow of the island.
- Proposals on Southwark Street also include introducing footway build-outs and reconfiguring parking/loading provision to allow for the new crossing point and improve the pedestrian environment.
- Surface treatment along Redcross Way and O'Meara Street to create a 'cycle street' approach and prioritise people walking and cycling over vehicles. The current proposal shows a temporary approach, using paint or thermoplastic to create a surface pattern. Over the longer term (or when funding becomes available) permanent solutions to introduce blockwork within the carriageway could be introduced. This arrangement creates 2 'lanes' either side of the carriageway to provide an indicative space for cycling and visually narrow the carriageway. A similar approach has been introduced on Columbia Road in LB Tower Hamlets.
- An informal crossing is shown on O'Meara Street to highlight the Low Line route between Flat Iron Square and Southwark Square. This includes introducing dropped kerbs and a surface treatment.



Below: Columbia Road in LB Tower Hamlets provides an approach that could be applied to Redcross Way and O'Meara Street in the longer term.





New informal crossing at Southwark Street, creating a central refuge island and using a surface treatment (e.g. paint or thermoplastic) to highlight the crossing location.

Southwark Square site

Key Low Line walking route

Cycle crossing of Southwark Street improved through the introduction of a refuge island providing better protection for cyclists in the 'shadow' of this.

Flat Iron Square

Informal crossing of O'Meara Street to highlight the Low Line route and aid wayfinding.

Development site

Surface treatment to the carriageway of Redcross Way and O'Meara Street to create a pedestrian and cycle priority environment. Designated space for cycling is suggested at either side of the carriageway.

Church of the Most Precious Blood

Interesting approaches to planting could be tested along Redcross Way and O'Meara Street, exploring vertical or high level planting for example.

Union Street

Key Low Line walking + cycling route

Crossbones Garden

# Scheme 4: Holyrood Street

Holyrood Street provides a connection between Bermondsey Street and Shand Street, and forms the first link of the Low Line for people arriving at London Bridge and travelling east. It therefore plays a vital role in the Low Line route, providing a gateway towards the quieter area outside of the central activities zone (CAZ).

The Holyrood Street area is undergoing significant change, with plans for a new green wall and cafe/kiosk, and refurbishment of the 22 Shand Street building, and 7 Holyrood Street building. There is an existing small evening economy in Holyrood Street centred around Nine Lives. There is also industrial activity, with Network Rail using a depot within the arches, and residential buildings looking on to the street towards the western end. Gibbons Rent, a Team London Bridge project provides an unexpected green oasis. Despite the development there remains a significant amount of untapped potential within Holyrood Street, with several vacant railway arches, an undercroft space and a significant amount of unused carriageway space. Long term plans include the refurbishment of these spaces, creating a potentially distinctive and active section of the Low Line. However the public realm will play a vital role in these changes.

## Key issues and opportunities

- The planned development on Holyrood Street presents an exciting opportunity to reconsider the public realm and access arrangements.
- The legibility of the space as a through-route is limited, and measures to create a better gateway to the space, and encourage through-movement would improve wayfinding along the Low Line.
- Crossing Bermondsey Street is a key challenge, and no crossing facility is currently provided.
- The junction of Holyrood Street, Magdalen Street and Bermondsey Street is overly wide and creates a vast area of carriageway for pedestrians to contend with. Addressing this and giving more space to pedestrians and public life would help to create a better gateway.
- Vehicle movements in/out of the Network Rail facility are currently from the west through the undercroft, but to enable these spaces to be maximised it would be helpful to enable access from the east.
- The space lacks planting and greenery, though the

proximity to Gibbons Rent provides an opportunity to build on this and introduce more greenery into the street, though new interventions at the new kiosk and outside the Nine Lives bar are already making a difference.

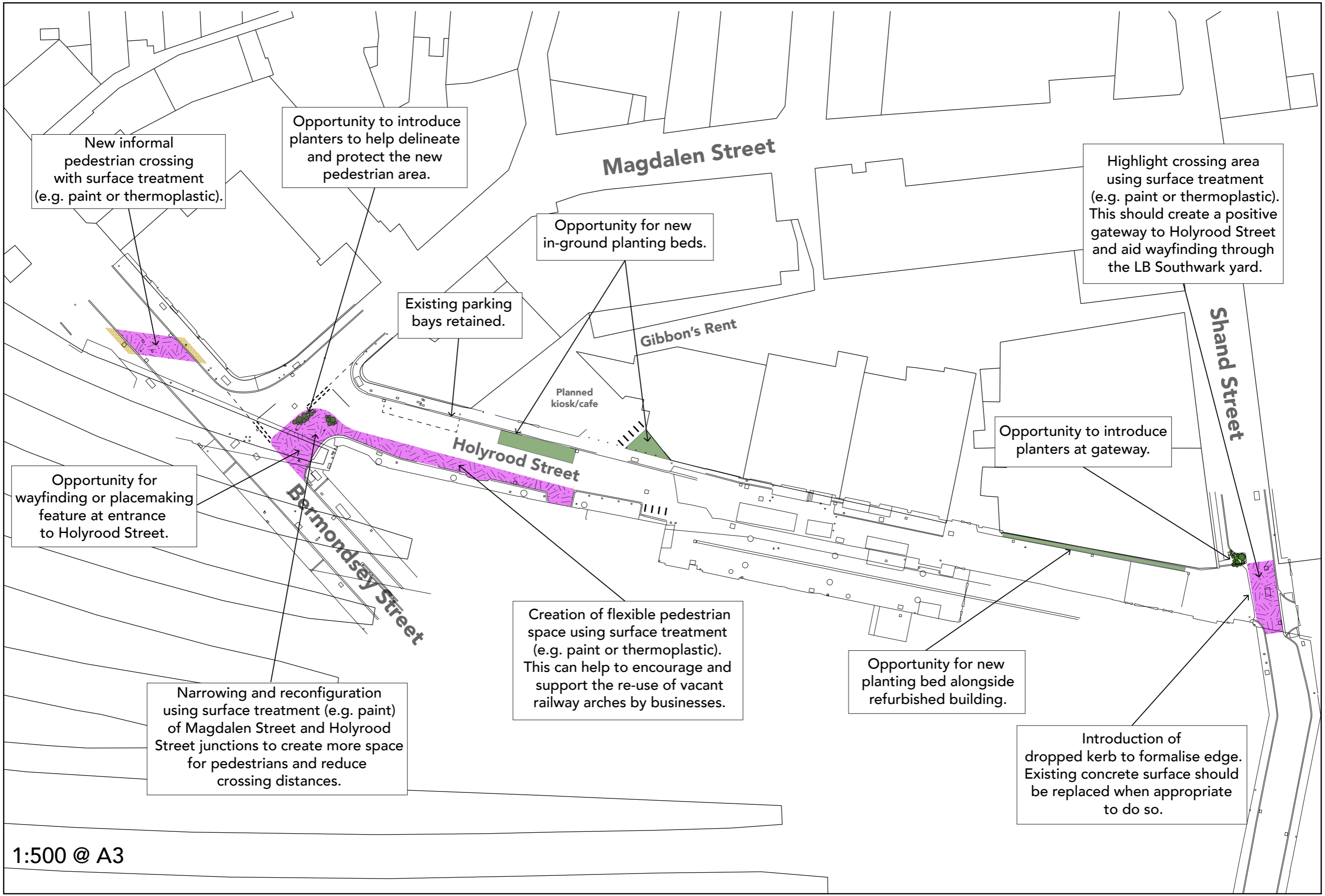
- There is a lack of cycle parking on Holyrood Street,, although a significant amount is provided across Bermondsey Street.

## Proposals

The proposals seek to improve the legibility of Holyrood Street as a destination and through-route for pedestrians, provide opportunities for public life and to stimulate investment in vacant units, and to improve road safety and crossing facilities.

- Introduction of a new diagonal informal crossing of Bermondsey Street, highlighted by a painted surface. This could include a raised table, subject to road safety checks.
- Narrowing of the junction of Magdalen Street and Holyrood Street with Bermondsey Street using low tech methods such as street furniture and paint or surface treatments. Vehicle access to Holyrood Street has been tracked using a 2 axel 7.57m refuse collection vehicle.
- Creation of a new gateway public space on the new widened area at the Bermondsey Street junction. Opportunities for wayfinding and creative interventions could include signage or adornments on the railway structure, or lighting installations. The space also provides an opportunity for planters, drawing the Gibbons Rent oasis out into Holyrood Street.
- Paint has been employed along the south side of Holyrood Street to narrow the carriageway and define space for public life- where businesses could spill out into the street. This also provides further opportunities for planting to be introduced.





New informal pedestrian crossing with surface treatment (e.g. paint or thermoplastic).

Opportunity to introduce planters to help delineate and protect the new pedestrian area.

Opportunity for new in-ground planting beds.

Existing parking bays retained.

Planned kiosk/cafe

Highlight crossing area using surface treatment (e.g. paint or thermoplastic). This should create a positive gateway to Holyrood Street and aid wayfinding through the LB Southwark yard.

Opportunity to introduce planters at gateway.

Opportunity for wayfinding or placemaking feature at entrance to Holyrood Street.

Narrowing and reconfiguration using surface treatment (e.g. paint) of Magdalen Street and Holyrood Street junctions to create more space for pedestrians and reduce crossing distances.

Creation of flexible pedestrian space using surface treatment (e.g. paint or thermoplastic). This can help to encourage and support the re-use of vacant railway arches by businesses.

Opportunity for new planting bed alongside refurbished building.

Introduction of dropped kerb to formalise edge. Existing concrete surface should be replaced when appropriate to do so.

1:500 @ A3



# Scheme 5: Druid Street

Druid Street and Crucifix Lane present a key challenge for the Low Line route. The street environment is traffic dominated, forming part of the TLRN, and the one-way traffic circulation system lacks cycle contraflow. Being part of the strategic road network significant change along Druid Street will require careful consideration and testing, and is considered a longer term project.

There is also a lack of activity along this stretch in terms of public-facing businesses such as shops, cafes, bars and cultural attractions. This creates a gap or void in the Low Line, and discourages people from venturing east towards the Bermondsey end of the Low Line. Improving the public realm or providing a point of interest along this stretch would help to encourage footfall and support the businesses further east.

Despite this, this area benefits from the Whites Grounds Skatepark, a public open air skatepark within a railway arch; and Hop Kingdom, an indoor skatepark and bar which sit on Druid Street at the junction with Whites Grounds.

Improving access to the public realm around the skatepark and Hop Kingdom would create a more vibrant and visible stopping point or attraction along the Low Line route, as well as supporting a local community facility. It also sets an example for future street and public realm improvements for Druid Street and Crucifix Lane. This forms the focus of scheme 5.

## Key issues and opportunities

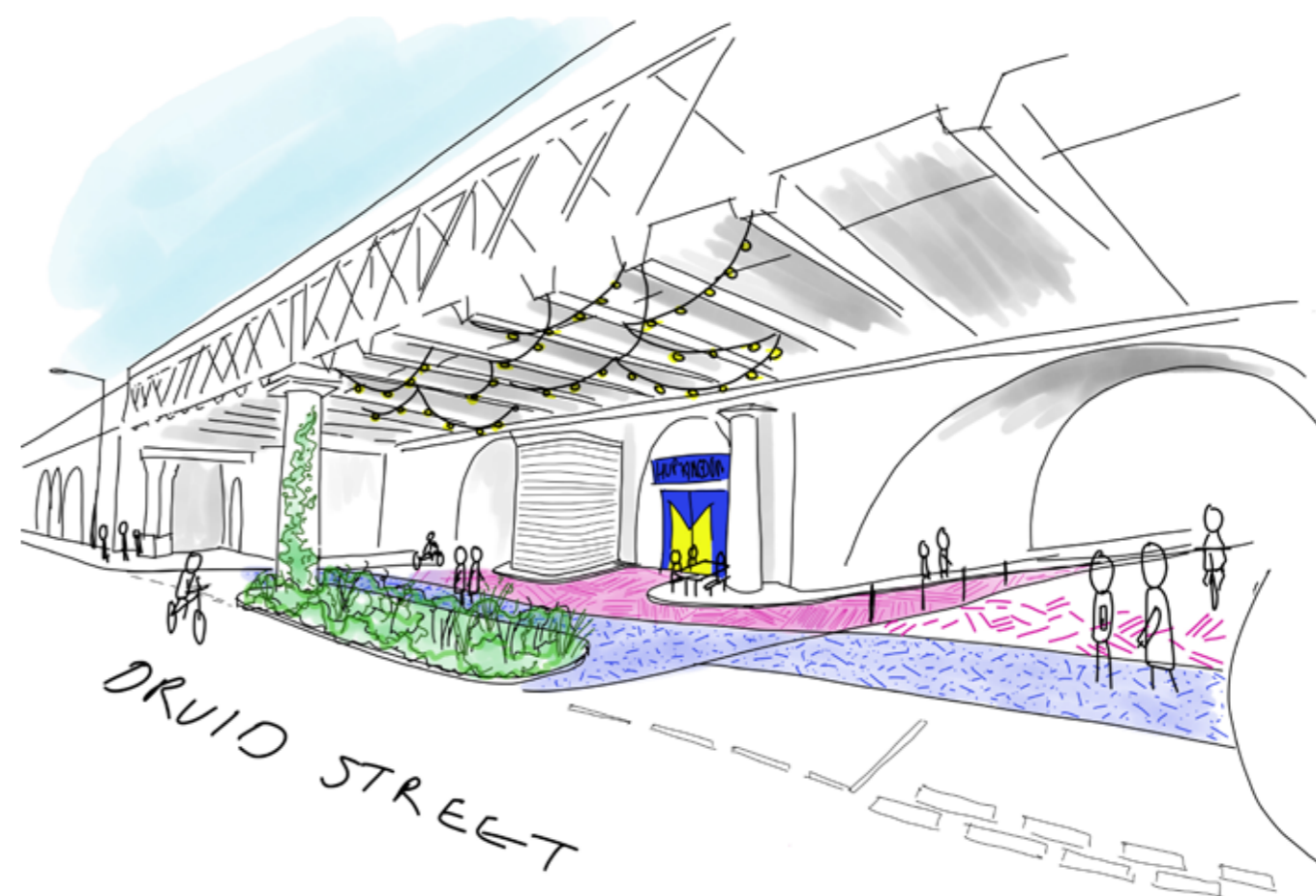
- High traffic levels on Druid Street threaten the comfort, safety and attractiveness of the street.
- The quality of the public realm around Hop Kingdom and Whites Grounds Skatepark is very poor, however the large expanse of unused carriageway space, and the shelter provided by the undercroft provide a unique opportunity to create a usable outdoor space and wayfinding installation.
- There is a lack of planting and greenery on Druid Street, however the undercroft limits possibilities of planting in some areas.
- Lighting within the undercroft area is also poor, and improvements could address this in a creative way.
- Druid Street currently lacks pedestrian crossing points, and addressing this to reinforce the Low Line route and provide a safe environment is key.

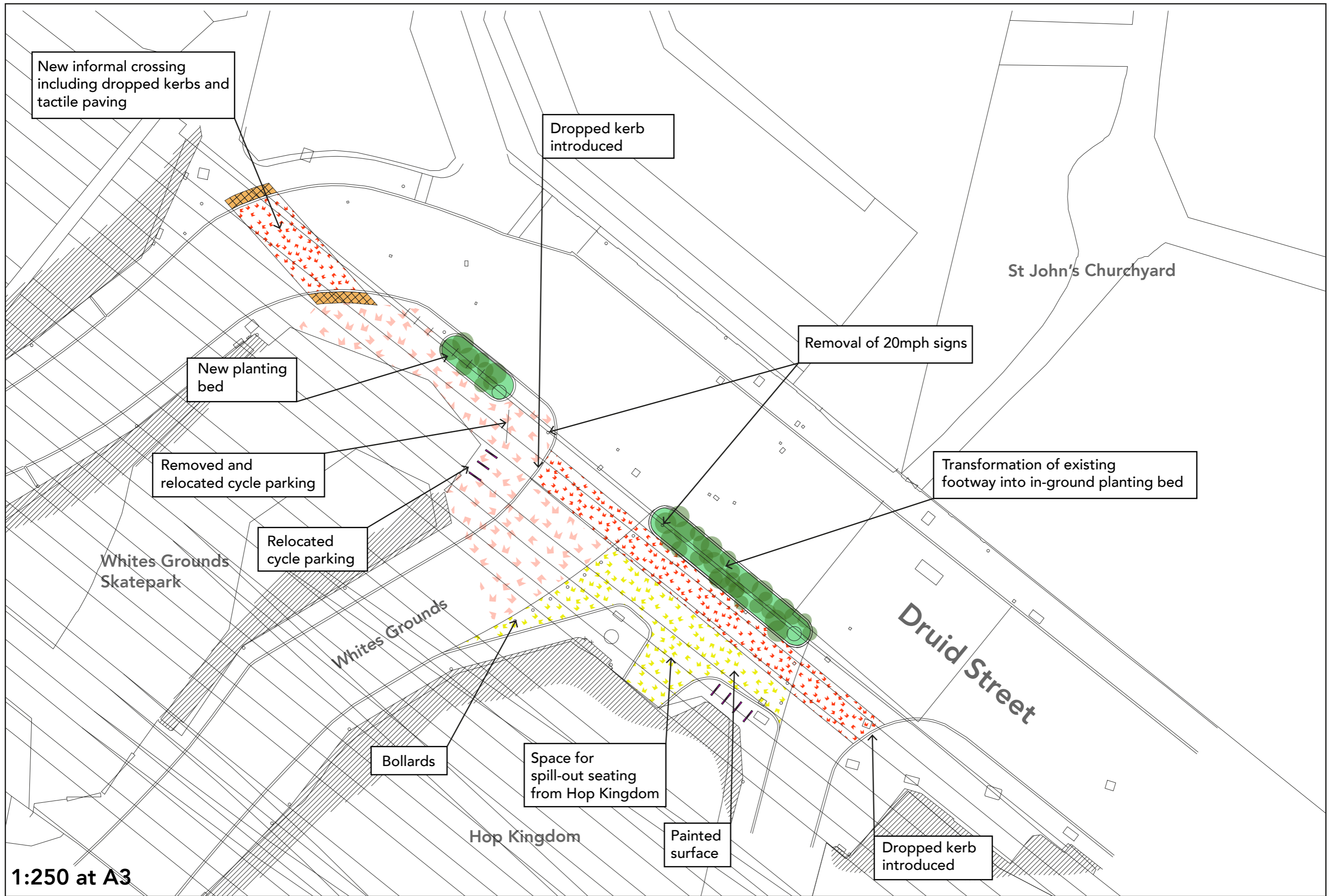
- Cycle access along Druid Street is very poor, with high traffic levels, no protected facilities and no contra-flow cycling permitted.

## Proposals

The proposals include creating a new pocket park in the undercroft space outside Hop Kingdom, and introducing an informal crossing on Druid Street to align with the Low Line route. The proposals are explained in further detail below:

- Creation of an informal crossing point on Druid Street, prior to the railway arch tunnel. This includes introducing dropped kerbs and tactile paving, and highlighting the crossing by introducing a painted or patterned surface within the carriageway on the crossing alignment.
- Introduction of planting beds on the edge of the footway west of Whites Grounds, and conversion of the footway between Whites Grounds and Brunswick Court into a planting bed. This footway currently has no dropped kerbs, and could otherwise be accommodated within the space outside Hop Kingdom. Further design work could include draining water from the railway into the planting beds. These provide some separation between people walking and vehicles, and will help to create a more green and attractive environment.
- Introduction of a painted or thermoplastic surfacing treatment within the existing carriageway outside Hop Kingdom. The surface treatment should seek to define a new 'footway' or walking zone through the space, to replace the footway given over to planting. The remaining space can be used for spill-out from Hop Kingdom, seating or public art, which could be further developed through discussions with the business owners.
- Introduction of bollards or other street furniture, as well as paint to create a defined 'kerb line' on Whites Grounds and Brunswick Court.
- Introduction of dropped kerbs on the west side of Whites Grounds and East side of Brunswick Court to align with new informal crossings.
- Further improvements could involve introducing distinctive placemaking features such as a lighting installation, street furniture or public art. The surface pattern design within the carriageway areas could also be developed with Hop Kingdom and local artists.





New informal crossing including dropped kerbs and tactile paving

Dropped kerb introduced

St John's Churchyard

Removal of 20mph signs

New planting bed

Removed and relocated cycle parking

Transformation of existing footway into in-ground planting bed

Relocated cycle parking

Whites Grounds Skatepark

Druid Street

Whites Grounds

Bollards

Space for spill-out seating from Hop Kingdom

Hop Kingdom

Painted surface

Dropped kerb introduced

1:250 at A3

# Scheme 5: Druid Street

Druid Street is a complex street environment with differing contexts. The area west of Tanner Street forms part of the strategic network in London (TLRN) and is managed by Transport for London. South east of Tanner Street, the street has much lower levels of traffic and no longer forms part of the strategic network, instead being managed by LB Southwark.

This section is home to a range of businesses from breweries and bars to mechanics. Each have differing logistical needs, and over time a growing number are part of the local evening economy, attracting people to the area during the evenings and weekends.

This brings with it challenges, particularly regarding the impact on local residents living in the housing estates

in the surrounding area. Noise is a particular issue highlighted.

Proposals here provide a starting point for a process of engagement with local residents and businesses, and represent early ideas rather than a fully resolved scheme.

The sketches below show how a green edge to Druid Street could be created to help provide more defined spaces for visitors, and to provide screening between the estate and arches. The ideas also suggest a flexible and adaptable approach to the use of space in front of arches, creating an indicative 'footway' through surface treatments and providing flexible space for parking/loading and 'spill-out' seating areas.



Above: weekday/daytime



Above: weekend/evening

# Scheme 6: St James's Road area

St James's Road is located towards the eastern Bermondsey end of the Low Line, and is a locally strategic street. The proposed Low Line route runs along Lucey Way and Blue Anchor Lane, crossing St James's Road. Currently plans in the area include introducing a modal filter and pocket park at the Blue Anchor Lane junction with St James's Road, and introducing a parallel pedestrian and cycle crossing. Improvements also include introducing tree planting on Blue Anchor Lane. These proposals tie in with plans to refurbish 4 existing railway arches on Blue Anchor Lane.

Lucey Way forms a key part of the Low Line route providing a direct connection following the railway line however street environment is poor. As a housing estate

road (i.e. not public highway) Lucey Way is essentially a linear car park divided into two sections by bollards. Spa Terminus runs alongside the 'street' however is separated by a palisade fence. The space does not look and feel inviting. Improvements along Lucey Way could seek to make the space feel more like a pedestrian and cycle priority street firstly by removing the poorly designed speed bumps and defining a route using surface treatments. Improving the entrances to Spa Terminus, and utilising the water tower as a point of interest would help to improve access to Spa Terminus. In the longer term, the palisade fencing could be removed to create a softer boundary, utilising the existing trees. The through-arches in the centre of Lucey Way are also a key opportunity for an interesting creative project or pocket park.

