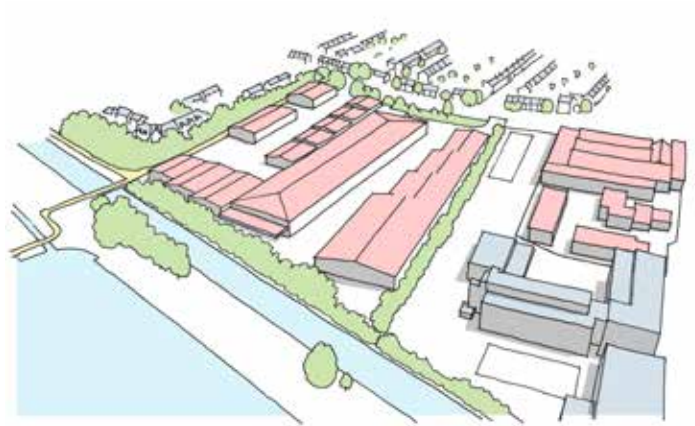
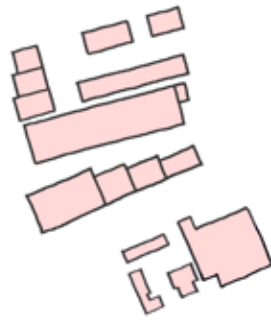


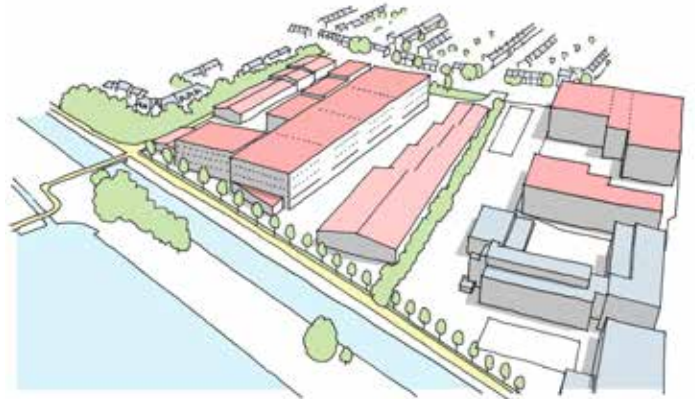
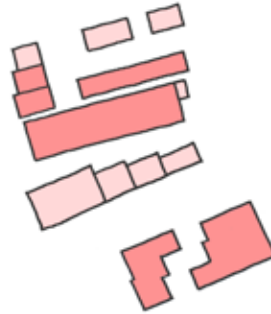
EXISTING SITE

The area identified for industrial retention and intensification comprises 3.94 hectares and includes 20,042sqm of floorspace, split between the Lockwood Estate, the DeltaGroup site and the northern element of the BlackRock site.



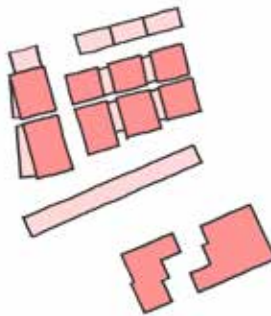
INTENSIFICATION MODEL ONE

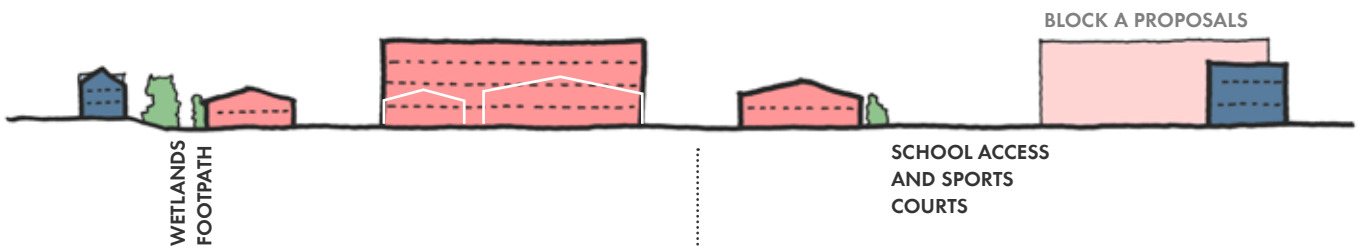
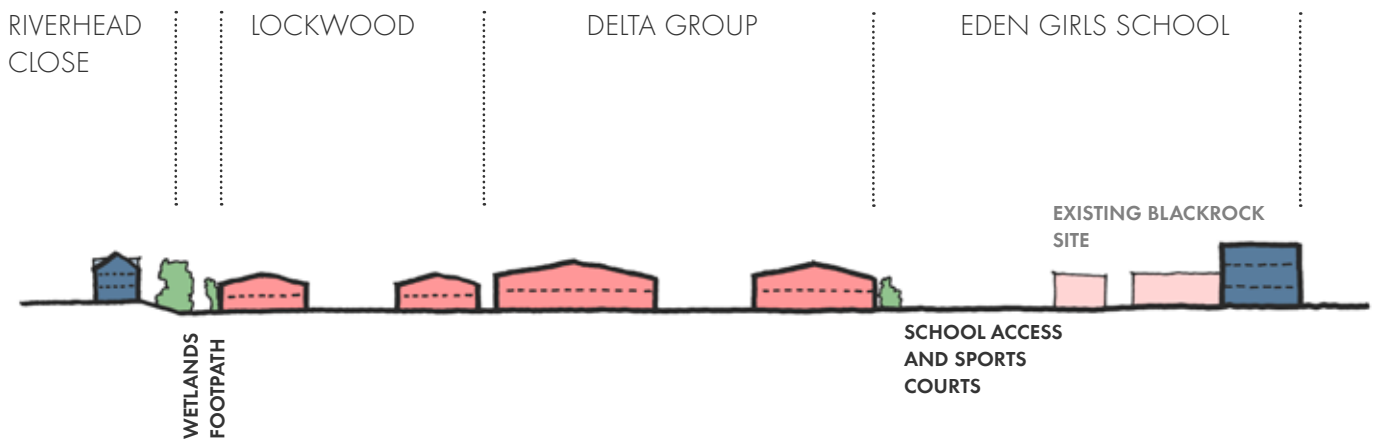
Retain the existing outer ranges of building to preserve the existing boundary conditions with neighbours and intensify the industrial capacity within the footprint of the existing buildings up to 48,000sqm.



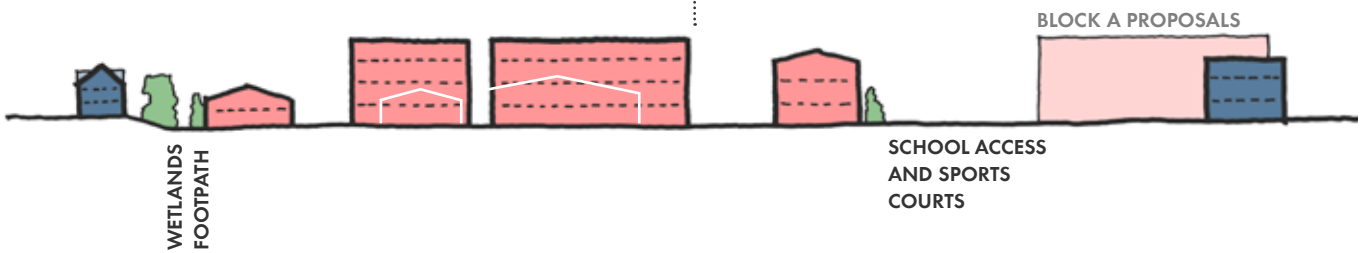
INTENSIFICATION MODEL TWO

Redevelop all the existing buildings to allow for a significant increase in the footprint of the central area and achieve a larger overall density, expected to exceed 48,000 sqm.





Reducing the footprint of the outer buildings could help to support a significant increase on overall capacity of the sites





5.5 Co-location of uses and Agent of Change

Priority needs to be given to the provision and protection of space for industry within the SIL, allowing for continued activity. An intensified area of SIL in the northern part of the existing zone is a key part of retaining and protecting industrial uses. In the re-designated area of LSIS the relationship between industrial uses and new residential development needs to be considered to protect industrial uses from agent of change issues.

The needs of industry in terms of space and operations needs to be protected through good design to avoid conflict with residential development.

The process of transformation should be a positive benefit for industry through providing modern premises which meet requirements and also through being designed with their relationship to the wider context in mind.

A new mixed use district should be a positive, vibrant place, maximising the benefits of urban living for both businesses and residents.

Positive benefits of co-location

- 5.4.1 Whilst the primary purpose of creating a mixed use district is to better utilise the finite supply of land within London, there are also a number of positive benefits that will come through this process of renewal. Some of these benefits will be directly beneficial to the industrial uses and others to the wider collection of further uses, but they are rooted first and foremost in ensuring the long-term continuity of industrial provision within London as a vital part of the city's operation.

Benefits for industry

- 5.4.2 *Long-term protection.* A key issue for industrial space is the threat of being limited in some way by neighbouring uses - the 'agent of change' principle puts the onus on the new use being introduced to overcome these challenges. The development of new industrial space where the relationship to adjoining uses is a specific part of the design development can help to ensure that businesses can be provided with spaces where they can be sure of retaining the ability to operate, whilst the amenity of nearby and adjoining uses can also be protected.
- 5.4.3 *More varied industrial typology.* Study of the Blackhorse Lane area has identified that the nature of spaces being sought by current businesses differs substantially from the original industries on site. Comprehensive renewal of the industrial stock allows for facilities to be created which will better meet the needs of today's occupiers and anticipate the flexibility required for future uses. This applies to both the formats of the buildings themselves, including units size and future flexibility, but also to aspects such as data connectivity and sustainable options for energy and transport.
- 5.4.4 *Better industrial environment.* The creation of modern fit-for purpose industrial space is likely to



help with attracting and retaining good industrial tenants. The delivery of the kinds of space that are in demand and offer a quality of environment not found elsewhere is also likely to help with the ability of landlords to better curate and manage space.

5.4.5 *Opening up to customers.* Historically, industrial manufacturing was a messy business and therefore the SIL was designed as to be inward looking, with separation from the surrounding neighbourhoods. Through engagement, many of the businesses expressed concern that the area is uninviting and had a poor street-environment for walking at a detriment to their business. The businesses on site are increasingly outward-facing with 50% interested in having customer-facing space in the future. A redevelopment of the SIL has the potential to support footfall through a welcoming built form and public space, as well as new residents to support the local businesses.

5.4.6 *More attractive neighbours.* Creating space for industry as part of a wider area redevelopment allows the potential for a distinctive and characterful built identity to be established. Historic industrial spaces such as warehouses and workspaces in urban areas remain in demand and form part of cohesive neighbourhoods in ways that modern twentieth century industrial sheds have not. This process offers a chance to rediscover and reinterpret that robust industrial architectural character to create attractive neighbourhoods within a mixed use district.

5.4.7 *Space to collaborate.* A consistent trend for modern business, including within the food and tech sectors that are strong in Blackhorse Lane SIL is the potential for collaborations as part of a wider ecosystem. Creating Higher quality shared spaces within multi-occupancy buildings and high quality shared public realm in the form of yards and streets can help to foster this collaboration and networking between businesses.

5.4.8 *Accommodating flexible working patterns.* Higher density mixed use areas provide the opportunity for people to live and work within closer proximity, as well as being closer to other amenities such as shops, local schools, nursery provision and leisure activities. As the trend in working patterns continues from COVID towards a more flexible blended approach between home working and workplace for many, the ability to work and live in relatively close proximity, coupled with easy access to other facilities offers businesses a more attractive option which will help to retain staff.

5.4.9 *A strong local identity.* Blackhorse Lane is already home to a number of well-established companies and strong brands. However, they and the area itself remain relatively hidden in the wider identity of the borough. The creation of a new place provides the context for the development of a strong identity to be established around these businesses which in turn will help to attract customers and other like-minded businesses to the area.

5.4.10 *Protecting continuing uses.* Whilst the masterplan framework covers the whole of the SIL, some areas may not change for a considerable time. The structure of the framework takes account of this, ensuring proper consideration of existing uses to protect their presence and continued operation even whilst their context changes.

Mixed use benefits

5.4.11 *Creating an urban buzz.* One of the aspects of city living which attracts people is the sense of living in a neighbourhood which includes variety and opportunity. Areas which can support this diversity have typically been found in central locations with higher density. However, as the city has grown and changed, the opportunity for genuinely mixed use districts has spread to a wider area, replacing the more suburban distinctions between housing and industrial areas. In doing so it offers a positive response to the more intense use of land within Waltham Forest.



5.4.12 *Supporting local businesses.* A genuinely mixed use district provides the opportunity for businesses to be part of an area where they can maintain both a production facility, but also a customer-facing aspect to their presence. This can help local companies such as food producers to offer their produce directly to local people. To achieve this, the businesses will further benefit from having a critical mass of people living and working within their catchment area.

5.4.13 *Safe streets and spaces.* A key criticism of many areas which only feature one use is that outside of their core hours, they can feel empty and unsafe. This could be especially said of many industrial areas into the evenings and at weekends, as noted in the wider public consultation. The combination of street level uses which predominantly activate the streets through the day and residential uses which overlook streets in the evening provides a much greater sense of activity and safety around the clock.

5.4.14 *Critical mass for commercial uses.* Just as the critical mass and mix of uses supports local industry and contributes to a safer environment, the combination of workspace and homes within the same area provides the best conditions and the critical mass of people to support commercial uses such as shops, cafes, restaurants. This will both support the growing centre around Blackhorse Road Station, but also will help to support elements of local provision within new development.

Benefit to the wider population

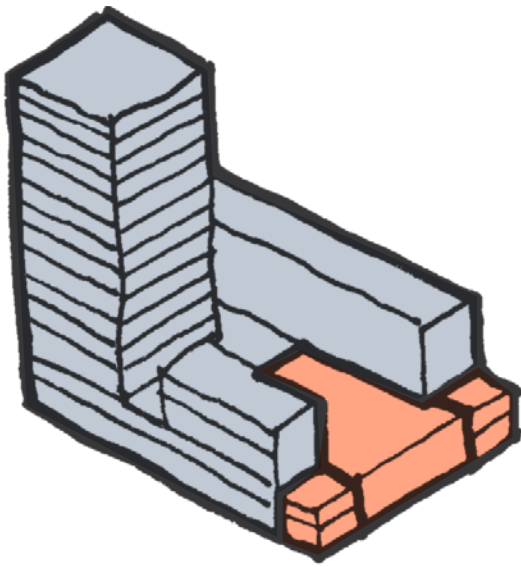
5.4.15 The Blackhorse Lane area doesn't exist in isolation, but within the wider context of existing established neighbourhoods. The opening up of new spaces, businesses and connections through the area stands to benefit not only its new occupants but also the wider community, by opening up new links towards the wetlands, and offering a wider range of local employment opportunities, shops and services.

5.4.16 *Better neighbours.* Redevelopment can create improved neighbour conditions between the existing residential and the industrial uses through the design process. Positively considering and addressing the needs of the wider context with relation to the industrial use can help to manage the relationships between them, both protecting the ongoing operation of the industrial uses as noted above, but also protecting and potentially improving the amenity of existing residents.

5.4.17 *Integrating the wetlands.* Walthamstow Wetlands is a major asset for the area, both in terms of its leisure and wildlife but also for the sheer sense of open space which it affords at the edge of the borough. The existing industrial area restricts access to the edge of the valley and limits views. The opportunities for views out from within the industrial area are further limited by the levels changes within the wetlands due to the raised edges of the reservoirs. New development in the area creates the potential for elevated views out from publicly accessible spaces which will help the local area to benefit from and engage with this strategic open space.

Suitable development types

5.4.18 Stacked industrial space within the co-location LSIS area would enable residential development in other parts of the zone as neighbouring uses. However, there is also the potential for co-location of uses within a block or building, where industrial use forms a podium to residential development above is also a suitable development type and is detailed in the following section.



Podium industrial

5.5.1 In areas where co-location of industrial and other uses is possible, there are also building types which can successfully combine different uses in one building or urban block. One way of doing this is having industrial space included as the ground floor podium use within a larger block. This condition has the potential to attract agent of change issues which would need to be clearly tackled through the design of the different elements of the block and their relationships to each other.

5.5.2 A positive feature of this approach is that it makes efficient use of land, utilising the air-space above single storey industrial use whilst also allowing business to retain the existing direct at-grade access for servicing. The model of a residential podium over another use such as car parking, supermarket or other large floorplate use is also a well-established typology, and a proven option in terms of delivering quality amenity space in the form of the central courtyard garden.

5.5.3 The structural grid of the residential and industrial elements will need to be carefully coordinated so as to create clear and effective spaces which are not complicated by columns from uses above. The potential for transfer of noise, vibration or odour to residential space above is also likely to require special attention to the structure of the building to ensure that there is sufficient isolation between industrial space and other users.

5.5.4 Careful consideration should also be given to the arrangement of entryways of the residential and industrial units. Ideally, entryways would be separated on a different side of the urban block from the residential entrances. This would help minimise conflicts between vehicles, pedestrians and cyclists. Residential entrance sequences would need to be considered carefully to balance the need for separation from industry while also creating simple and direct entrances to new homes.





5.5.5 From the engagement, five businesses that would be well-suited to a podium unit have been used as a case study to inform the design of this building type. These businesses were selected based on their size. The following insights can be drawn from their questionnaire responses regarding their operations and requirements:

- Businesses were also potentially interested in: covered yard space, shared yard space, larger premises and communal/shared facilities (cycle storage, showers, etc.). Exploring these elements in future designs may help to make for a more efficient use of space.
- Most were serviced by vans frequently throughout the day and podium units are likely to have more large vehicle movements. On average, across the 5 businesses used as a case study, businesses suited to podium units have 16.8 LGVs/HGVs per week and 14.1 articulated/flatbed lorries.

Design principles:

Noise, vibration, air quality and odour transfer from industrial uses may take a number of forms when homes sit above industrial space, each of which requires different measures to address:

- **Consideration needs to be given to transfer of noise and vibration through the structure of the building, addressed through structural separation and increased wall and floor acoustic performance.**
- **Flanking transmission of noise from industry to residential through the surrounding space can be addressed through various measures which include better enclosure of industrial spaces to reduce noise escaping; orientation of habitable rooms away from noisier spaces; and providing protective measures for residential uses through elements such as solid balcony parapets, winter gardens and triple glazing.**
- **The noise from yard spaces and vehicle movements can be addressed through the wider design of the area to reduce reversing, as well as arranging residential space to minimise overlooking into vehicle-dominated spaces. Further measures in specific locations could include covered yard space or canopies to reduce direct noise from vehicles. Podium amenity space may also benefit from an element of acoustic screening in the event that it is located overlooking industrial streets or yard space.**
- **The position of air handling and vents, as well as refuse storage in relation to residential uses are also important design factors.**



Figure 32 Areas identified as appropriate for intensification of industry in red - the north and eastern edge.

- Intensify and consolidate industry
- Retain industry and co-locate with other uses

New homes

- 5.5.18 As was set out in Chapter 5.1, the strategy is to locate industrial intensification where there is better access to the strategic road network in the north and east of the SIL. Conversely, the south and west of the SIL are seen to be appropriate for retaining industry co-located with new uses.
- 5.5.19 The introduction of new homes will help meet demand in the area, with new shops, restaurants, cafes and social infrastructure creating a sustainable neighbourhood where residents and workers have everything they need within a 15 minute walk or cycle.
- 5.5.20 The residential capacity has been calculated by applying the density range of 250 to 400 dwellings per hectare (dph) to the developable mixed use area, and the density of 300 to 500 dph for the residential-led area. These densities are drawn from similar precedents within London. This has demonstrated a residential capacity of 2,500 to 3,500 new homes across the SIL. A further breakdown is provided by sub-area in Chapter 6.

Supporting infrastructure

- 5.5.21 Landowners will be required to deliver supporting infrastructure to meet the needs of the growing community. This could be through direct delivery, Section 106 contributions, or Community Infrastructure Levy contributions. This includes:
- Health care capacity;
 - nursery, creche and school capacity;
 - community space, play space and green space;
 - and contributing to place-specific priorities such as Walthamstow Wetlands, the Creative Enterprise Zone, affordable workspace and Enjoy Waltham Forest projects in and around Blackhorse Lane.
- 5.5.22 Need should be calculated in collaboration with the Council. Further detail can be found in the Infrastructure Delivery Plan and the emerging Developer Contribution SPD.

Agent of change

- 5.5.23 NPPF paragraph 187 states that both planning policies and decisions should ensure that new development can be integrated effectively with existing businesses and community facilities. "Unreasonable restrictions" should not be placed on existing businesses as a result of development permitted after they were established. "Where the operation of an existing business or community facility could have a significant adverse effect on new development (including changes of use) in its vicinity, the applicant (or 'agent of change') should be required to provide suitable mitigation before the development has been completed."
- 5.5.24 In addition London Plan Policy D13 confirms that the Agent of Change principle "places the responsibility for mitigating impacts from existing noise and other nuisance-generating activities of uses on the proposed new noise-sensitive development." The policy requires proposals to considered the following during the design process:
- Ensuring good design mitigates and minimises existing and potential nuisances generated by existing uses and activities located in the area
 - exploring mitigation measures early in the design stage, with necessary and appropriate provisions including ongoing and future management of mitigation measures secured through planning obligations
 - separating new noise-sensitive development where possible from existing noise-generating businesses and uses through distance, screening, internal layout, sound-proofing, insulation and other acoustic design measures. In addition LP1 Policies 31 (Co-location principles), 36 (Promoting Culture and Creativity), 38 (Blackhorse Lane CEZ) and Policy 53 (Noise, Vibration and Light Pollution) all require development proposals to have due regard to agent of change principles.



5.4.19 For all of the benefits of creating a mixed use district to be realised, protection needs to be afforded to the continuation of existing businesses and the future protection of new businesses through this agent of change principle. New development should therefore consider the factors that might trigger the agent of changes issues and demonstrate how they are addressed through their proposals. This is likely to include the following key issues:

Noise and vibration

- 5.4.20 Industrial activities can be noisy, both inside and outside buildings. Schemes should demonstrate how they respond to the potential impact of noise and vibration and address it effectively through permanent measures rather than management. This is likely to include options such as:
- Providing increased wall and floor acoustic protection and elements of structural isolation to avoid noise transfer within a building;
 - Separating access routes for servicing from residential streets through a clear road hierarchy;
 - Designing residential accommodation so that it doesn't look out directly into an industrial yard or a main access route. For example, courtyard block enclosed on three sides rather than four could enable the servicing of industrial at ground to not be overlooked by any residents. Or dual aspect units would allow less sensitive rooms to face industrial uses with more sensitive rooms facing away.
 - Designing residential units with triple glazing, winter gardens or acoustic fences
 - Locating new residential development so that it doesn't introduce agent of change issues with existing industrial uses on neighbouring sites; and
 - Considering options for covered yard space which provides an element of acoustic screening.

Odour and air quality

5.4.21 While Blackhorse Lane does not seem to have any businesses which create issues with odour or air quality, full mitigation should be put in place to support future industrial tenants within the same use class to be able to operate in the space. Measures which should be considered include:

- Incorporating proper extraction and air handling plant into buildings which contain different uses. Importantly, this may require ducting to run vertically through the whole building to exit above roof level;
- Considering position of 'blow out' safety vents on safety equipment;
- Considering waste storage and management so that large bins are potentially stored away from residential properties or in enclosed storage to manage odour; and
- Lowering emissions from transport within the site through providing charging infrastructure to promote a shift to electric vehicles; promoting active travel with high quality walking/cycling routes and any residential development being car-free; and consolidating deliveries.

Visual amenity

5.4.22 Industrial buildings vary widely in their form and character. Whilst many historic industrial buildings have been positively embraced as attractive and become welcome parts of their context, later Twentieth Century industrial buildings have often been constructed to be as utilitarian as possible.

5.4.23 Proposals for new industrial buildings should consider them as part of a wider townscape, balancing the need for robust affordable workspace against the need to sit well in their context. This consideration should also be applied to thinking about the outdoor yards spaces, loading areas and refuse storage.



Large vehicles

5.4.24 Large vehicles are essential for industrial uses, but can result in noise and vibration. This has been an issue on Hookers Road where new residential development faces onto the SIL. Measures should include the following:

- The movement framework has been designed to create a hierarchy of streets, focusing larger vehicular movements on specific streets. The layout also creates loops so large vehicles can enter and exit the site in forward gear, minimise reversing manoeuvres across the site.
- Requiring Delivery and Servicing Management Plans with the subsequent planning applications.
- Reducing or removing the need for lorries to service non-industrial uses through delivery consolidation strategies whereby last-mile servicing can be incorporated with a preference on cargo and e-bike deliveries.
- Decreasing speed limits across the site to reduce traffic associated noise.

Hours of operation and lighting

5.4.25 The engagement with existing occupiers has identified that there are very few businesses which operate what could be described as anti-social hours. Furthermore some of the businesses which operate into the evening bring positive life and activity into the area and will be welcome defining parts of the character of the place. In particular, breweries with tap rooms, local food producers and creative uses could have a valuable public-facing role. Nevertheless, any future development must mitigate for potential impacts so that existing and future businesses, of industrial and non industrial use (eg. taprooms) can continue to operate if other uses are introduced. In particular, new development should mitigate for the impacts of noise, lighting and access for businesses operating into the evening or at night. Measures to protect the ability of businesses to operate into anti-social hours include:

- Arranging massing in a way that lit yard space for businesses (including taproom seating) are not directly overlooked by new homes and where this is not possible arranging dual aspect flats so that more sensitive rooms face away;
- Ensuring that the routes to access business during anti-social hours have minimal impact on new or existing residential development.- This could include demonstrating that residential space above the street is set well back and protected.
- Considering covered loading bays which provide better shielding and acoustic protection for residents.

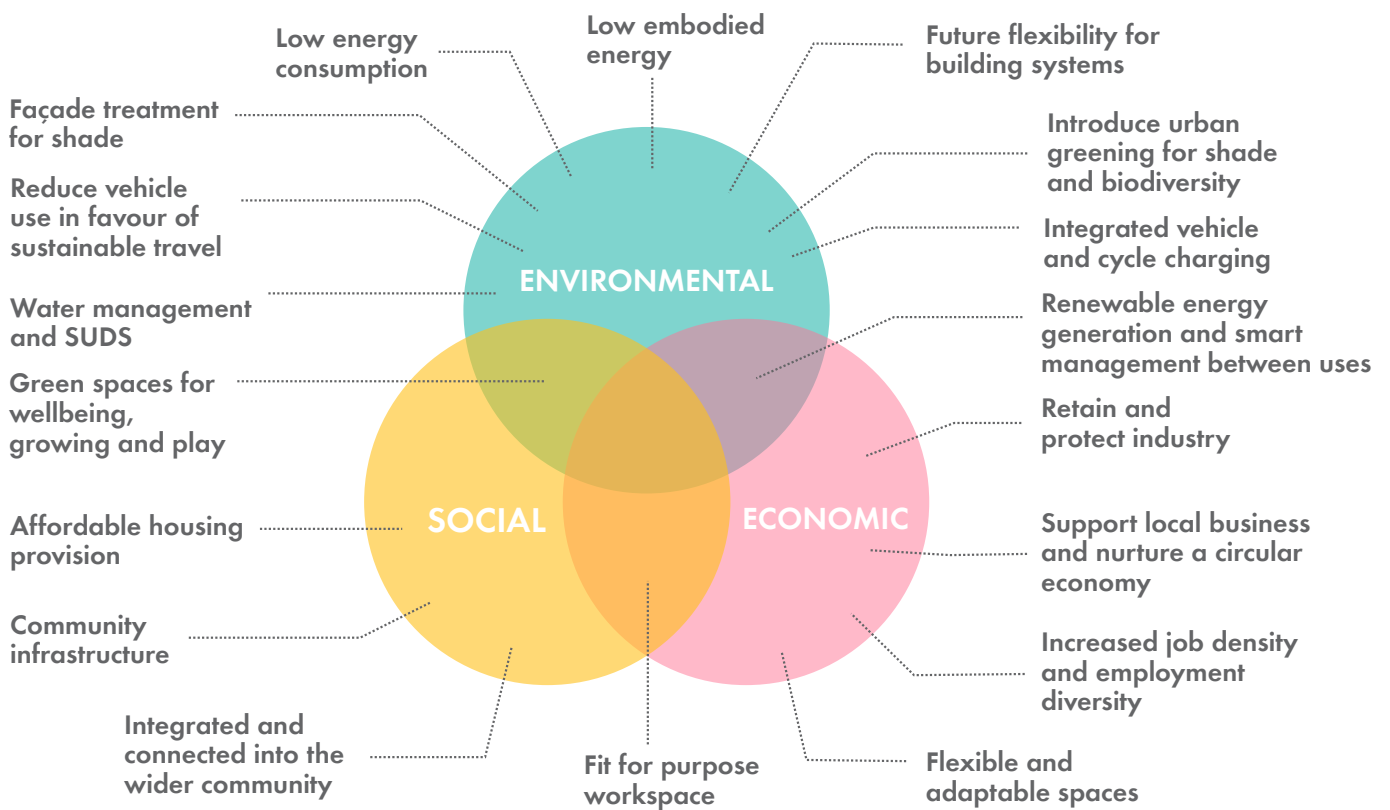


Figure 33 Sustainability objectives for Blackhorse Lane SIL



5.6 Sustainability

Sustainability should be the consistent linking thread to the proposals for the area, drawing together environmental, economic and social sustainability. Proposals should aim to be best in class across the whole masterplan area to help tackle the climate emergency.

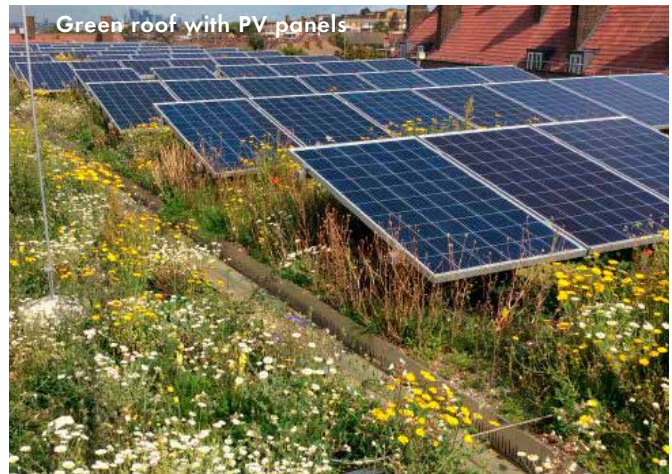
The creation of a mixed-use urban district has the potential to bring sustainability benefits to the wider existing area, providing an anchor development to bring in practical benefits such as district heating as well as a more diverse range of local facilities.

A new green approach to the site will introduce greenery and sustainable water management to an area which is almost exclusive hard surfaces at present, with further benefits to biodiversity.

Replacement of dated industrial buildings will allow for a radical improvement in their energy performance, as well as their functionality to support businesses growth.

A commitment to high building standards. The Council has aspirations for buildings to be BREEAM outstanding, highest possible home quality mark standards or Passive Haus as part of the commitment to zero carbon development.

- 5.6.1 The Blackhorse Lane SIL is being planned amidst a Climate Emergency. The Waltham Forest Local Plan (emerging LP1) establishes that the borough will build its resilience to climate change through addressing all aspects of sustainability, efficient waste management and the effects of climate change through all stages in the development process. The framework for the Blackhorse Lane SIL has the potential to support the Council's progress towards this vision by encouraging carbon neutral development and transforming into a socially, economically and environmentally sustainable place.
- 5.6.2 The three are interdependent and reinforcing: access to nature and a high quality physical environment, allows local communities to thrive. A happier and healthier community supports the local economy through increased productivity and creativity. And an economically robust community has the resources to reinvest in their environment. Therefore the objective is to deliver sustainable development in the fullest sense, recognising that the objectives of delivering environmental sustainability provide long term health and wellbeing benefits and also make sound economic sense.



New Buildings

- 5.6.3 Through the engagement process, businesses expressed concern about the lack of insulation and poor heating efficiency as well as a lack of natural light. Replacement of dated industrial buildings will allow for a radical improvement in their energy performance. Design of new buildings should comply with London Plan Policies SI2 SI 2 emissions, SI3 Energy Infrastructure and Draft Policies 87 a Zero Carbon Borough, 88 Decentralised Energy and Policy 89 Sustainable Design and Construction.
- 5.6.4 Buildings should be designed to respond to local climate, maximising sunlight and daylight, designing out overheating (and minimising mechanical cooling and including breeze soleil) and mitigating for wind and micro climates using low carbon interventions. Project-specific building performance standards should be set to embed an ambitious approach that responds to the local context.
- 5.6.5 The development of new buildings should take into account both the energy efficiency through their lifespan, but also their embodied energy through the construction process. This is exemplified in Policy 89/E of the emerging LP1 which requires the adoption of sustainable construction and demolition methods and the selection of sustainable materials and re-use of materials arising from demolition.
- 5.6.6 New buildings should be designed for longevity, with high quality materials that last and the potential for adaptation across their lifespan. The block structure should allow short-term and long-term flexibility.

Energy supply and generation

- 5.6.7 The development of a large area in a coordinated way provides a valuable opportunity to consider a district heating network which serves the whole area rather than having independent systems for buildings and homes. There are number of options for this kind of centralised system, such as those that draw on waste heat or renewal sources. The masterplan area should be supported by one area wide low carbon heat network.
- 5.6.8 This would deliver on London Plan and emerging LP1 objectives. However, it is reliant on the network being available to deliver this connection and so solutions which allow development to progress before the connection can be achieved will need to be considered and designed to be connection ready.
- 5.6.9 There is also an opportunity to generate energy, making more active use of roofscapes through PV panels. This should be weighed up against the benefits of green and blue roofs.



Responding to engagement:
 Poor energy efficiency was one of the key concerns of businesses. Setting high standards for new buildings will benefit businesses with better temperature and lighting, as well as lower energy bills.



Water

- 5.6.10 In accordance with London Plan Policy SI5 (water infrastructure), water consumption targets should be developed for each building, looking to use technology to minimise waste wherever possible with high water efficiencies standards. Rainwater and/or greywater harvesting systems should be installed, which may also be beneficial to businesses.
- 5.6.11 While flood risk on the site is low, any new development has the potential to manage the risk of flooding proactively. Green Sustainable Urban Drainage Systems (SUDS) and green space in the public realm deliver high quality drainage, rainwater discharge attenuation and water filtration to protect groundwater quality in urban areas. The use of green, blue and brown roofs could also be explored. A flood risk assessment and management plan would be developed to tailor solutions to the site.

Movement

- 5.6.12 Emissions from transport are a significant contributor to Waltham Forest's carbon emissions. Interventions that can support people to walk, cycle and take public transport instead of using a car help to decrease these emissions. Walking, cycling and public transport also improve people's health and wellbeing through regular exercise, allow people to explore their neighbourhood and help save money.
- 5.6.13 Creating Healthy Streets, in line with Transport for London's toolkit, is a priority. In particular, considering high quality walking routes to the shops and Station at Blackhorse Lane will support people to live car-free. Similarly, high quality cycle routes should connect into the wider cycling network, and cycle parking should be provided in line with the London Plan's standards.
- 5.6.14 For many industrial businesses, reliance on vehicles for their operations remains a requirement and high quality access for these businesses must be prioritised. Where possible, businesses should be supported in transitioning to electric vehicles with any future development incorporating the necessary infrastructure. Delivery consolidation and use of cargo bikes could also be explored to further improve sustainability of transport in the SIL.
- 5.6.15 Section 5.5 gives more detail on the movement strategy.
- 5.6.16 This masterplan process and the future sub area work will need to commit to continuing and implementing the success of the Enjoy Waltham Forest Programme.



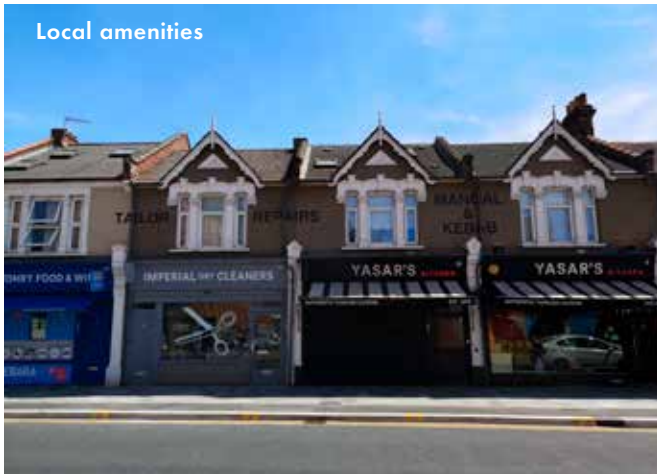
Greening

- 5.6.17 The SIL is almost exclusively hardscaping. There is a clear opportunity to increase and enhance biodiversity, ecological value and the green and blue infrastructure, enhancing its ecological value and increasing its resilience towards climate change.
- 5.6.18 The Council's aspiration is that any future development would exceed the Urban Greening Factor in the London Plan Policy G5. At a minimum, proposals should meet the policy requirement. Using a mix of urban green techniques is encouraged (street trees, hedges, ground cover, green walls, green roofs, SUDs and rain gardens, etc) to increase greenspace, deliver habitats, further improve biodiversity, and assist with carbon sequestration and water attenuation. Planting can also help to prevent local overheating through reducing the heat island effect and cooling through plant evapotranspiration, creating further resilience to the effects of climate change. Greening that is integrated, multi-functional and low maintenance is preferable.
- 5.6.19 The site is unique in its adjacency to Walthamstow Wetlands on its western edge. Planting focused along this edge could help to blend the two environments, which are currently stark by comparison. Where possible, this greening should continue into the site creating green corridors to extend ecological benefits, though it is recognised that planting will be reduced in industrial streets and yards as to not limit their functionality.



Ecology

- 5.6.20 The Walthamstow Wetlands (managed by London Wildlife Trust) is a significant habitat for many species, in particular recognised for their importance for migrating birds. Careful design will be needed to protect wildlife by minimising light and noise pollution and overshadowing. Early ecological appraisals and liaison with London Wildlife Trust, The Environment Agency, Thames Water and The Council will support proactive management of development impact.
- 5.6.21 There is also potential to explore the opportunities for habitat creation within any new development. Wildlife can be supported and ecology enhanced by incorporating a mix of natural planted habitats and artificial habitats (bird, bat, insect and bee nesting bricks and hedgehog houses).
- 5.6.22 The borough lies within the 0-6.2km Zone of Influence established for the protection of the Epping Forest Special Area of Conservation (EFSAC) from recreational impacts arising from development, in line with the requirements of emerging Policy 83. Future development will be required to provide mitigation for its impact on the adjacent Special Protection Area (SPA) and the EFSAC. This will be in the form of Strategic Access Management and Monitoring (SAMM) contributions payable on a per unit basis and contribution to deliver the Council's emerging Suitable Alternative Natural Greenspace (SANGS) strategy.



Economic and social sustainability

5.6.23 To be truly sustainable, the future of Blackhorse Lane SIL must have all the necessary ingredients for the businesses and local community to thrive long into the future. Over the past decade, the area has gradually evolved into a place for creatives and makers, alongside a growing residential community. There is potential for development to further compound these advances, integrating these uses and creating a whole that is greater than the sum of its parts.

5.6.24 As is explored in more detail in Section 5.2, the industrial intensification and the introduction of new uses to establish a mixed use neighbourhood has the potential to enhance economic and social sustainability in a number of ways:

- Creating long-term protection for businesses by securing investment and proactively planning for industrial growth.
- Providing more varied industrial space to meet the needs of businesses and embed flexibility.
- Shaping a better environment for industry by delivering the kinds of space that are in demand at a quality not found elsewhere.
- Opening up to customers through making a welcoming environment and responding to demand for outward-facing industrial space.

- Prioritising space for collaboration and to develop a business ecosystem.
- Creating a 15-minute neighbourhood by bringing places to live and work and all the necessary amenities (shops, local schools, nursery provision and leisure) within closer proximity
- Strengthening the local identity which enhances the commercial competitiveness of the area.
- Generating an urban buzz which draws staff, customers and like-minded businesses.
- Enabling more people to support local businesses by bringing production and consumption closer together.
- Making safe streets and high quality spaces to attract people to the area and support a healthy urban lifestyle
- Providing the critical mass of people needed to support commercial uses such as shops, cafes, restaurants.
- Becoming more welcoming neighbours to the surrounding residential communities, so they can feel the full benefits of having a thriving community of makers on their doorstep.
- Integrating the wetlands by opening up views and access to the nature reserve.



Figure 34 Proposed: the three lines concept

5.7 Design-led urban framework

Work with the three existing lines of the Wetlands to the west, Blackhorse Lane to the east and the Thames Water spine tunnel through the centre of the area.

Establish east-west routes making connections into the site through to the waterside

Create an integrated framework with the wider existing context, providing continuity and connections

Build in clear variety and hierarchy which responds to the character of the place and allows for a flexible range of uses.

Establish a coordinating framework which allows individual sites to come forward independently.

Clearly identify and safeguard those areas suitable for industrial intensification and those suited for co-location of industrial space with new uses.

5.7.1 The existing Blackhorse Road area is a complex mix of sites that has grown with relatively limited planning over the years. The history of opportunistic developments based around quirks of land ownership has left a district which is in some parts clear and legible and in others tortuous to access and navigate. This is borne out through the engagement with current occupiers which highlights the relatively poor accessibility and wayfinding, suggesting that a clearer public realm structure would be beneficial.

5.7.2 The aim of the urban framework for the area is to provide a clear structure of streets and spaces, creating urban blocks which can then contain a variety of buildings and uses. To achieve this, an overall framework is required which coordinates the development of the various sites, identifying the key requirements and enabling individual owners to come forward with their own approaches within this wider structure.

Three lines

5.7.3 The site is characterised by three contextual lines, of which one is currently invisible. Blackhorse Lane to the east and the water edge to the west are the site's primary structuring north-south lines, yet neither are currently reaching their full potential in terms of their contribution to the neighbourhood. The third line is constituted by default through the 22m exclusion zone above the Thames Water Spine Tunnel that crosses the centre of the SIL diagonally before running north-south through the Housing Zone. It is currently built over by low-rise sheds but starting to be revealed in the redevelopment of the Housing Zone sites.

5.7.4 These three lines offer the opportunity to build on the area's unique character by establishing three distinct experiences, which can be expanded on by each site within the wider SIL whilst ensuring coherence and consistency:

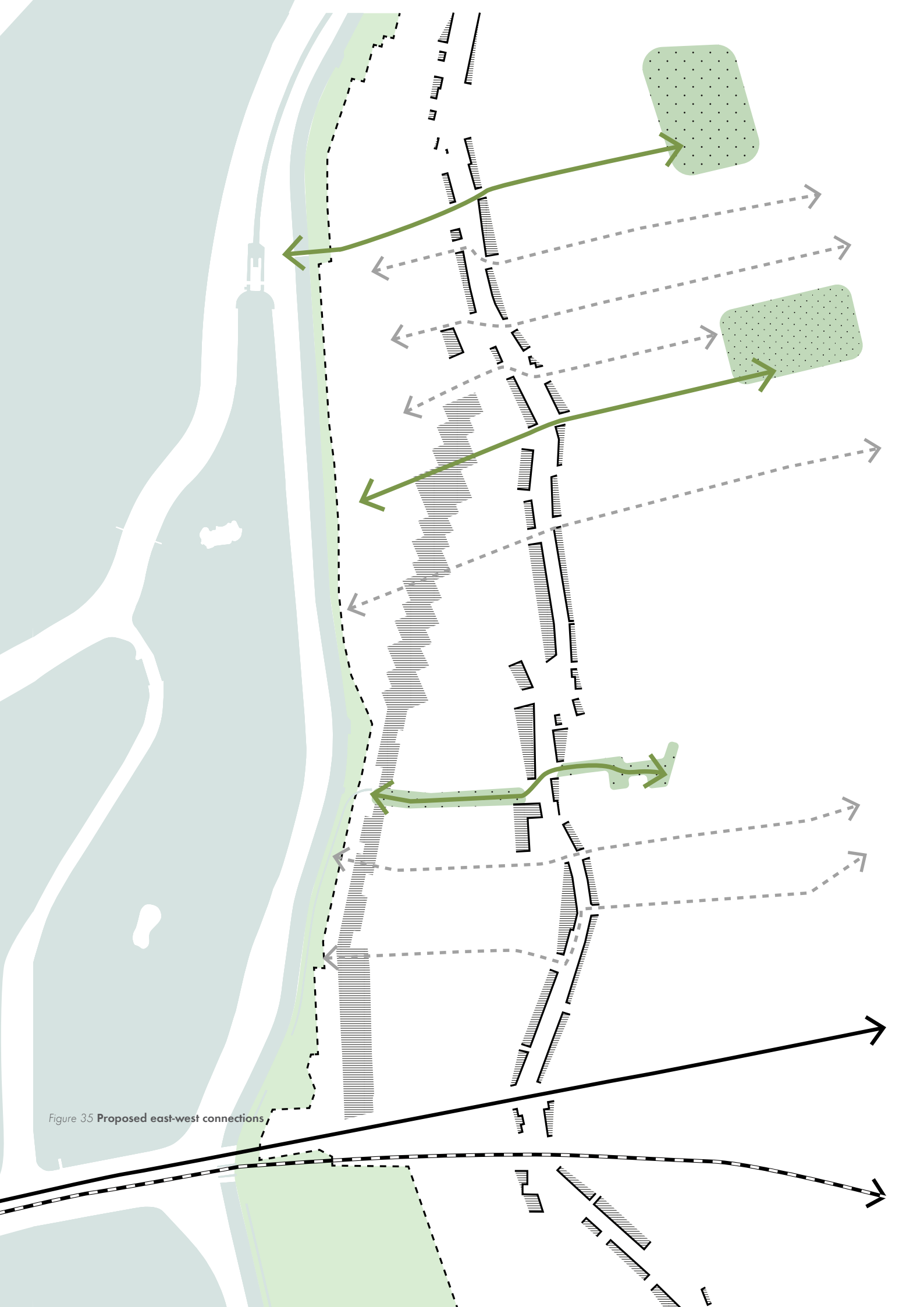


Figure 35 Proposed east-west connections



Responding to engagement:
Improving the legibility of the SIL
was a key priority for both businesses
and the wider community. The urban
framework responds to this feedback,
proposing an easy-to-navigate structure
which connects well with existing routes
and networks.

- Repair the frontage onto Blackhorse Lane through the creation of active street frontages that respond sensitively to the scale of the street whilst adding high-profile customer-facing shop fronts and workshops to the site's industrial offer. Create a series of welcoming and inviting entry points to the site.
- Use the Thames Water Spine Tunnel's exclusion zone, which cuts across the site, as an opportunity to introduce a series of connected yards and public spaces that retain the industrial functionality and character of the site whilst enabling a range of different uses and activities to take place.
- Connect the existing waterside pedestrian and cycle route to the north with the new pedestrian route through Blackhorse Mills and to Ferry Lane by creating a linear, green route along the currently inaccessible water's edge.

East-West connections

- 5.7.5 East west connections between the residential neighbourhood to the east of the site, the three lines and the wetlands are currently rather poor, both in terms of physical routes as well as visual links. Whilst the grid of residential streets is well-established in the northern part east of the site and links to key open spaces such as Higham Hill Park and Trencherfield Allotments, these routes currently only offer sporadic and poor quality connections further west, with most access points to the water side in private ownership.
- 5.7.6 Establishing these routes as high-quality walking and cycle connections would enable the existing residential community to develop a better connection with the wetlands, and help knit together the established neighbourhood with the newly emerging developments. Three key routes are of particular importance in this context:
- Worcester Road, connecting Higham Hill Park with the Wetlands' Lockwood Way entrance
 - Goldsmith Road, connecting Trencherfield Allotments with Uplands House and beyond
 - Dagenham Brook, currently culverted, leads from the Blackhorse Yards developments through the SIL to the water edge, where it surfaces east of the Flood Relief Channel as a second watercourse. The Blackhorse Yard development plans to de-culvert the brook, an approach which could also be investigated for the southern part of the SIL. The Dagenham Brook route could also reach a new bridge access into the Wetlands (subject to feasibility testing).



Figure 36 Proposed block structure

Framework principles

- 5.7.7 As established in section 5.1, the northern area is retained for intensified industrial use whilst the central and southern areas are re-designated as LSIS for co-located uses. Alongside these overarching structural elements, there are then a series of broader design-led principles which apply to the planning of a robust urban framework:
- 5.7.8 The framework should be planned to deliver continuity of connections, with clear legible routes that particularly enable people on foot or cycle to make easy and direct journeys through the area.
- 5.7.9 Within these routes there should be a clear hierarchy and distinct characters, ranging from key streets designed for movement of larger vehicles to support industrial uses, through to quieter streets for access and squares accommodating activities including yard space and public amenity. The range of uses which can be accommodated in the area will naturally require different environments, and this is expected to be expressed in the design of characterful and varied spaces.
- 5.7.10 In large part the new framework is expected to build on the existing street network, making new connections when they are needed to overcome barriers and create an integrated approach. Retaining existing streets where possible has numerous advantages beyond the purely sentimental attachment to the story and origins of the place. The existing streets also carry a significant amount of servicing and in some cases form dividing lines between ownerships. Retaining them helps to support a phased development to minimise disruption.
- 5.7.11 Industrial buildings tend, by their nature, to be simple and robust, with rectangular forms favoured for simplicity both in construction and also use. Residential buildings also benefit from simplicity and regularity. Within the broadly rectilinear nature of the SIL there are a number of challenges to be addressed, most particularly in the form of the Thames Water tunnel. These can be most readily tackled with irregularly shaped streets and spaces, bringing character and subtlety to the area whilst maintaining the most practical building forms possible.
- 5.7.12 Within the establishment of urban blocks, there should be a clear focus on delivering active frontage onto streets and public spaces, with a hierarchy that focuses more public-facing activities onto the most significant spaces.
- 5.7.13 The approach to the urban blocks should also reflect the fact that individual buildings are more flexible and more likely to change than the street network

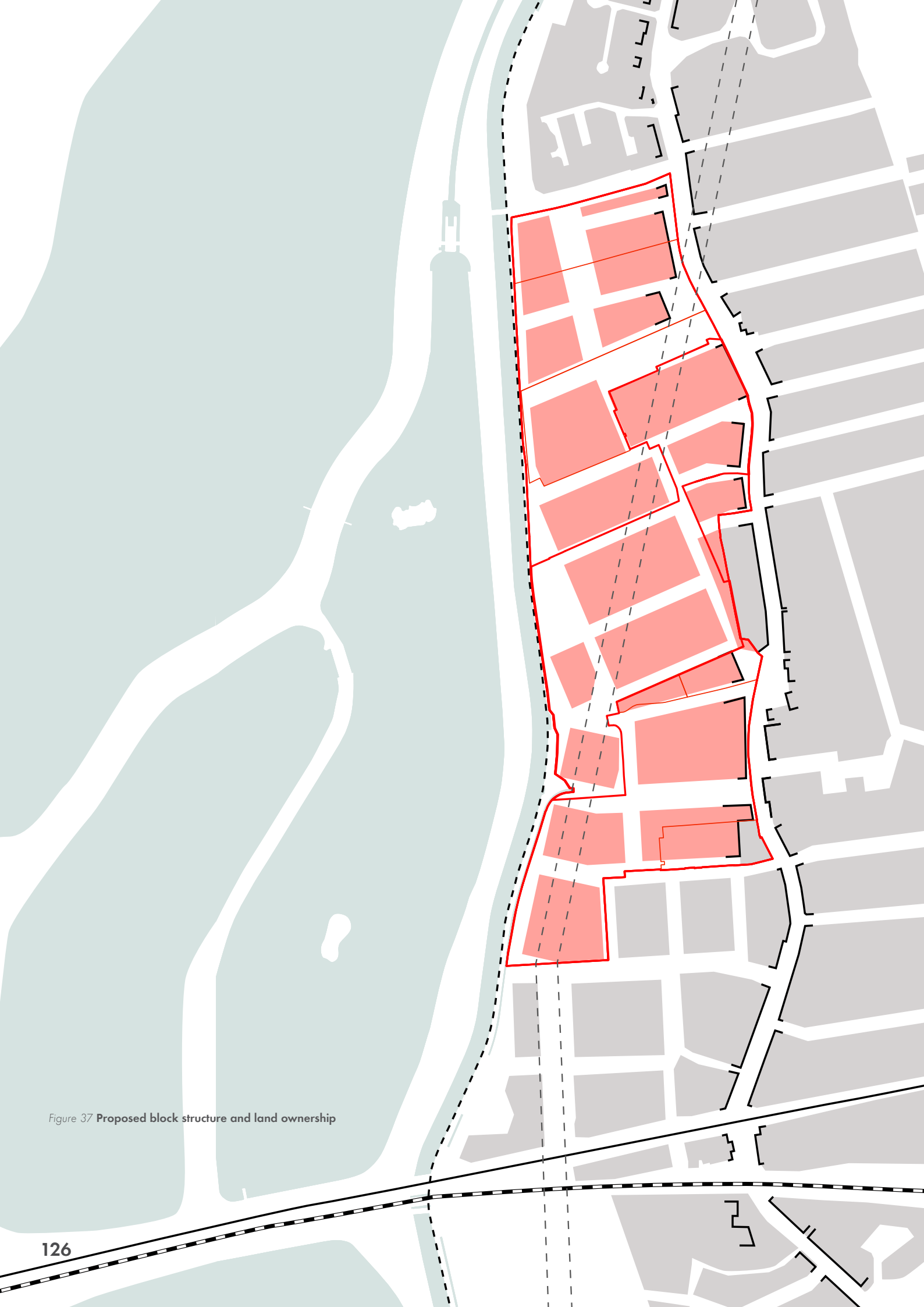


Figure 37 Proposed block structure and land ownership



5.7.14 The existing area lacks a coherent street and block structure which would enable it to develop organically to accommodate intensification and co-located uses. By comparison the Victoria Street pattern to the east of Blackhorse Lane demonstrates more ably how a mix of uses can be delivered within a coherent and connected place that allows for change over time.



5.7.15 The development of the sub-areas may be undertaken in any sequence, providing that the sites within each area are coordinated, and that they contribute to the wider framework objectives for connections and routes.

5.7.16 The central sub-area is considered most likely for early change, and has the potential to deliver a new street pattern and structure of urban blocks.



5.7.17 The block structure has been set out with an awareness of land ownership boundaries and consideration towards independent delivery.

5.7.18 As different parcels come forward for development, they can contribute towards the overarching vision for the area by forming their part of new routes, spaces and networks. Equally, each phase should feel like a complete and functional place, regardless of whether adjacent parcels come forward. This is exemplified here with the retention of Eden Girls' School.



5.8 Servicing and movement

Create a network which allows for safe and effective access to industrial premises for staff, visitors and servicing.

Use the sub-area structure of the area to create a series of Low Traffic Neighbourhoods.

Focus the activities which attract larger vehicle movements towards the northern area with the best access from Blackhorse Lane to limit their impact on the wider site and design the SIL to avoid the need for reversing or turning of large vehicles.

Use the network of streets created by the urban framework to establish a series of clear walking and cycling routes.

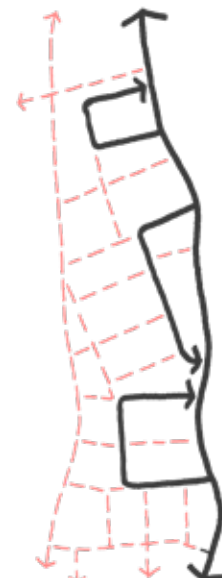
Residential development is to be car free (with the exception of disabled car parking), but the area should include carefully planned access for servicing, deliveries and visitors.

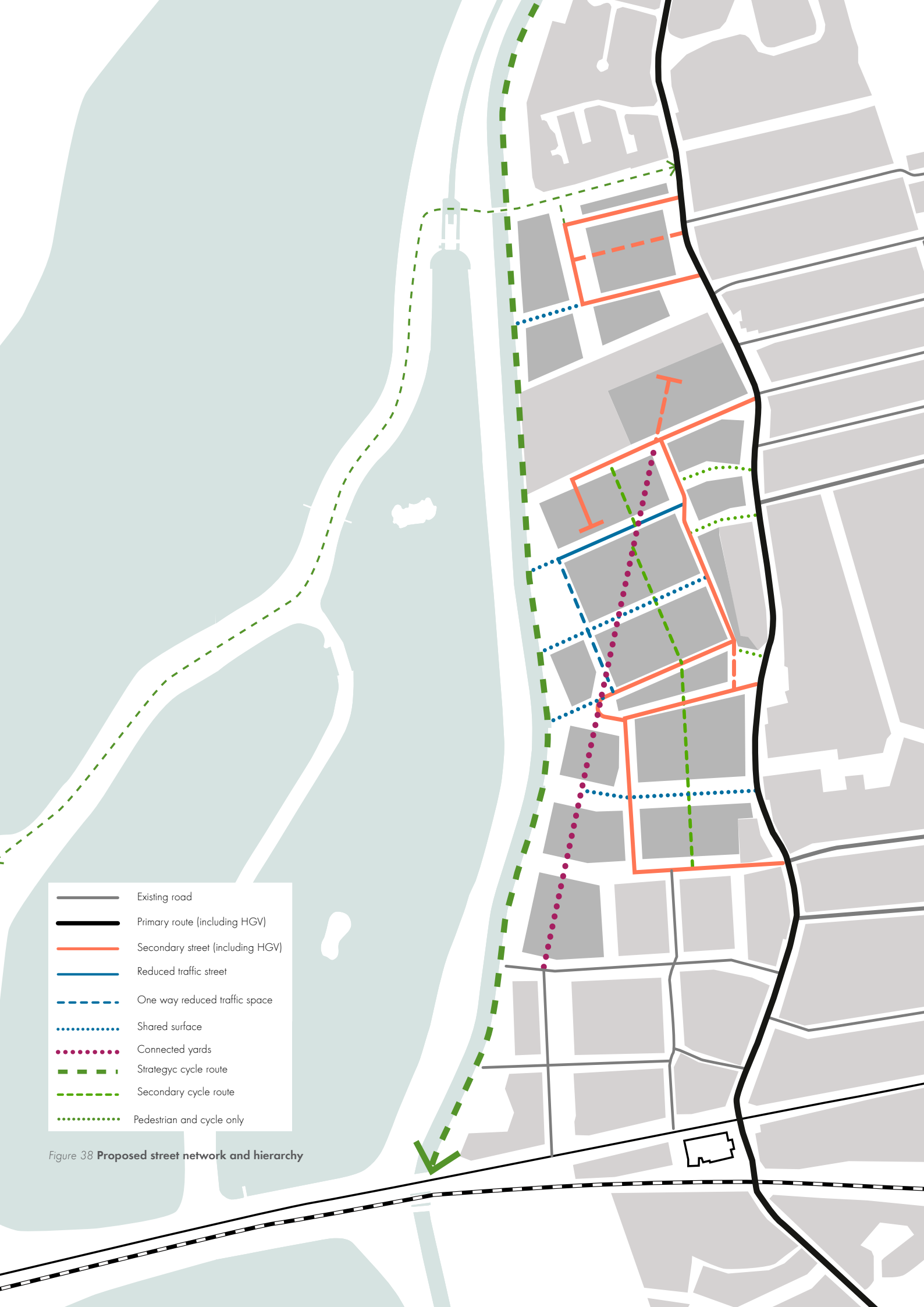
5.8.1 Blackhorse Lane has an important continuing role as the home of existing businesses as well as an evolving role becoming home to new businesses and residents. This will require the design of an area which can provide access to large vehicles to support industrial uses whilst also providing safer access for pedestrians and cyclists and thinking strategically about non-industrial deliveries and servicing.

5.8.2 The framework sets out a more permeable network of streets for the future of the area which has a number of benefits. More joined up connections will provide direct and legible access into the site for all users, particularly beneficial to pedestrians and cyclists. The increased number of streets also allows for a distinction in their function and character, concentrating larger vehicles on specific routes. More streets through the SIL will also increase the number of ground floor units with direct servicing access, a requirement of many industrial businesses. The ability for future owners to redevelop sites to connect into the initial stages is factored in to produce an overall legible and permeable scheme both in the short and long-term.



Transforming the area from a fragmented industrial estate into a clear structure of access routes and permeable walking and cycling network





- Existing road
- Primary route (including HGV)
- Secondary street (including HGV)
- Reduced traffic street
- One way reduced traffic space
- Shared surface
- Connected yards
- Strategic cycle route
- Secondary cycle route
- Pedestrian and cycle only

Figure 38 Proposed street network and hierarchy

5.8.3 Waltham Forest has been notable in recent years as one of London's 'Mini-Holland' boroughs (now called Enjoy Waltham Forest Programme) that have been funded to undertake a process of significant transformation of the public realm, improving walking and cycling infrastructure and reducing reliance on cars. This process has been recognised as a nationally significant model for good practice which should continue to inform the approach to streets and spaces within the SIL.

5.8.4 In addition, the COVID-19 pandemic saw significant shifts towards walking and cycling, largely in place of bus use, coinciding in the Government's cycling policy document, Gear Change, and the accompanying technical manual LTN1/20 which provides detailed design guidance for the public realm.

5.8.5 Whilst segregated infrastructure on main roads, including Blackhorse Lane are significant, within small defined areas the principles of Low Traffic Neighbourhoods which preclude rat-running through-traffic and the use of low design speeds to maximise pedestrian and cycle safety have already been well demonstrated by the borough's recent work. The structure of the Blackhorse Lane SIL in three distinct parts already effectively achieves this in terms of vehicle access - a principle which can be maintained as the new development is delivered.

5.8.6 The engagement with existing businesses demonstrates that public transport accessibility is one of the positive aspects about the site, with walking and cycling forming important connections. The residential development in this area will be car-free. Walking and cycling, either for complete trips or to connect with public transport will be a vital function for the public realm to deliver.

5.8.7 Larger vehicles and higher vehicle frequency will be focused on three routes towards the eastern side of the site to enable direct access with Blackhorse Lane. The vehicle size and vehicle frequency would be reduced further into the site where it will become vehicle free along the waterside edge

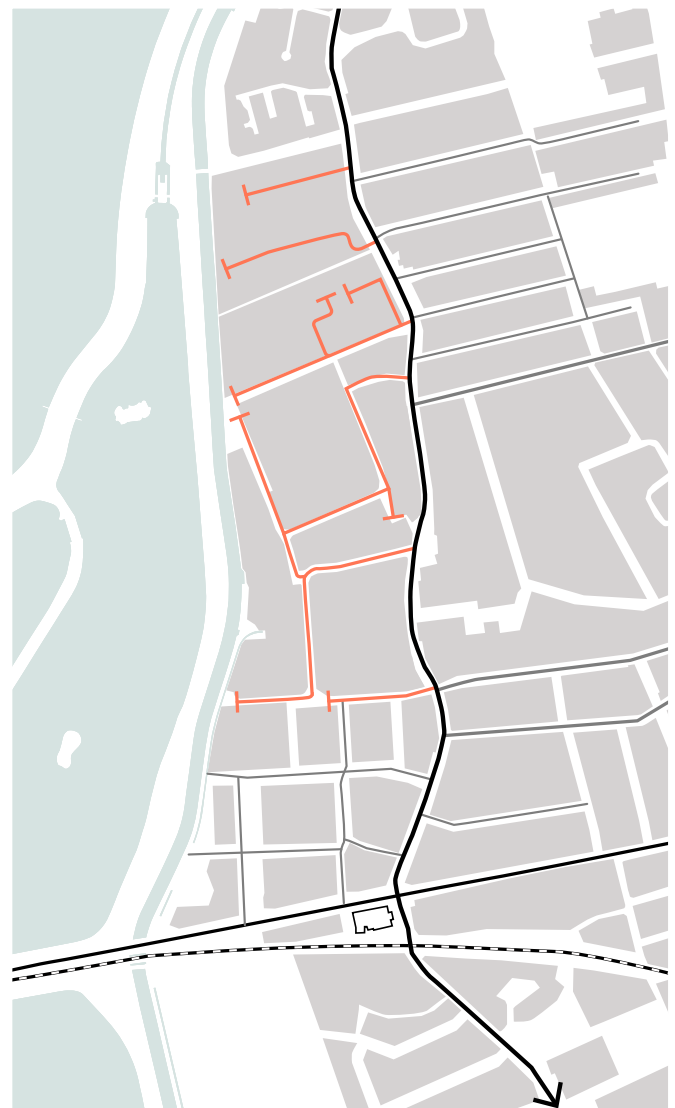


Figure 39 Existing street network and hierarchy



Responding to engagement: Improving the safety and character of the streets in the SIL was one of the top priorities for the community. The movement framework looks to establish a hierarchy of streets to provide safe, comfortable routes for pedestrians and cyclists, while focusing larger vehicles on specific routes.



Responding to engagement:
62% of businesses require yard or servicing space. These streets will need to be designed to priorities access to flexible yards and loading bays.

Servicing access for large vehicles



5.8.8 The existing access structure for vehicles demonstrates the fragmented nature of the existing area. Lockwood Way and the Delta site to the north form self-contained cul-de-sacs (1), whilst the southern areas are more complicated. In particular the lack of a connection between Hooker's Road and Priestley Way precludes a simple loop being available (2).



5.8.9 As the central sub-area is developed, there is the opportunity to create a simpler access loop, with vehicles entering from Blackhorse Lane at Goldsmiths Road and exiting in the south via Priestley Way (3). The opportunity exists to further improve the effectiveness of this loop by establishing a more direct connection with Blackhorse Lane (4).



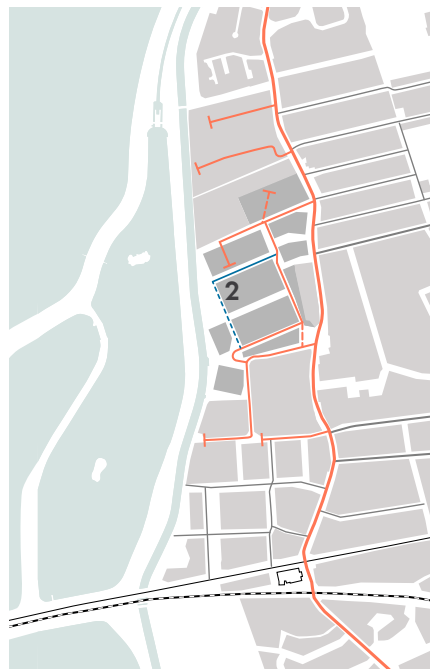
5.8.10 In the northern part of the sub-area yards will continue to provide access for servicing and deliveries to new and continuing industrial uses (5)

5.8.11 With the further development of the other sub-areas, two strategic opportunities exist to improve access for large vehicles and servicing. Firstly, to establish a loop within the northern sub-area to connect Lockwood Way and the Delta site (6). Secondly, to connect Priestley Way and Hooker's Road to form a safer continuous access loop for the southern sub-area which will eliminate the need to turn/reverse large vehicles (7).

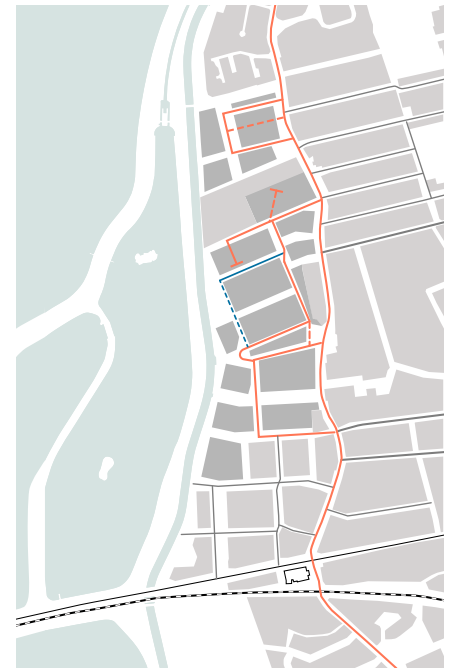
Secondary vehicle access



5.8.12 The existing site has no secondary routes which are used for non-industrial traffic, as might be expected with an industrial estate. However, the housing zone to the south establishes a network of secondary routes into which a remodelled form should connect (1).



5.8.13 As the central area sub-area is developed, it should include a secondary access road which is primarily focussed on walking and cycling access to the non-industrial uses in the western part of the site (2). This route also provides access for servicing, including deliveries and taxi access, refuse collection and emergency vehicles. It is intended to function as a one-way street for vehicles running north-south with the potential for cyclists to cycle in either direction.



5.8.14 There is limited further change required to the network as the northern and southern sub-areas are built out. However, there will be opportunities to make improvements to the southern connections along Hooker's Road.



Responding to engagement:
 Most businesses (80%) are serviced by vans once a day or more. By comparison, larger vehicles are used much less frequently.
 The movement framework focuses larger vehicles on specific streets, so that other streets can become a better environment for walking and cycling.

Walking and cycling network



5.8.15 Walking and cycling within the existing area is poor. Some routes within the area lack pavements and are dominated by vehicles. Blackhorse Lane provides a legible north-south connection and benefits from some significant lengths of new segregated cycle routes.

5.8.16 In the area to the south, new pedestrian connections are being delivered which will provide a finer-grain network of connections. This includes access to the southernmost section of the waterside (1). To the north is the existing connection into the Wetlands and towards the Banbury Reservoir (2).



5.8.17 The delivery of the central area is able to create a significant new network of routes including a car-free waterside route (3), new local access routes and a series of connected yards (4).

5.8.18 An important principle for the whole area is that all buildings, whether industrial or residential are accessible safely by foot and by bicycle. This is expected to be delivered through a combination of low traffic volumes and low design speeds to create a safe environment. This complements the more strategic network on Blackhorse Lane.



5.8.19 As the sub-areas to the north and south are developed out, the walking and cycling network can be more fully integrated, including clear connections south to the tube and rail station (5).

5.8.20 It is also an aspiration to deliver a continuous north-south route along the waterside, connecting the Forest Road with the Wetlands entrance and the routes on to the north. New developments will be required to incorporate this element, and it is hoped that the boundary of Eden Girls' School can be adjusted to create a suitable safe route(6).

Waltham Forest design standards

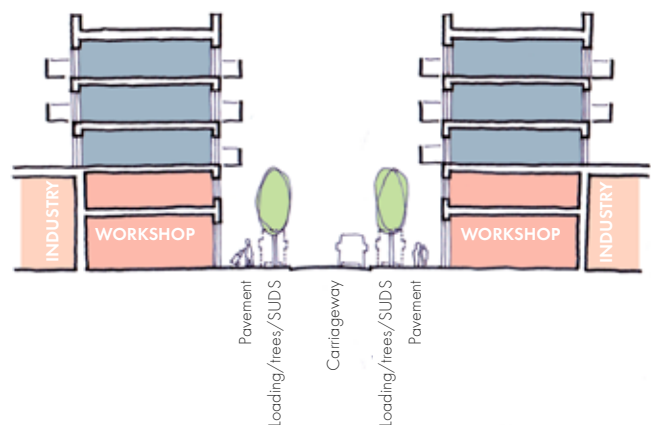
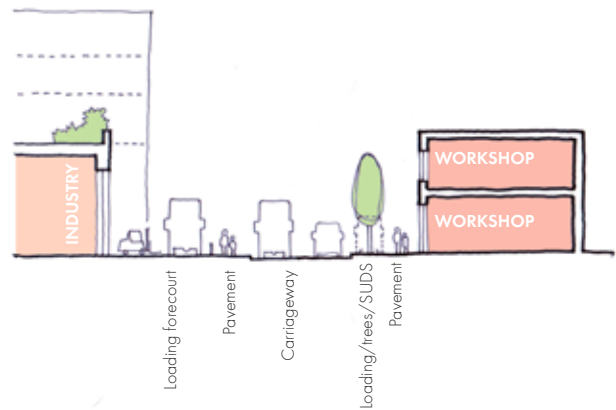
- 5.8.21 As part of the Enjoy Waltham Forest programme, the Borough has developed detailed standards for street design – the London Borough Waltham Forest Mini-Holland Design Guide. This should be read in conjunction with TfL's London Cycling Design Standards and applied to the design of new streets and spaces within the Blackhorse Lane SIL.
- 5.8.22 The guidance underpins a re-prioritisation of streets in favour of people walking and cycling to maximise sustainable modes of travel for short trips. This includes elements such as raised 'Copenhagen' crossing at side turnings and continuous pavements with dropped kerbs rather than bell mouth junctions at the entrance to individual sites.
- 5.8.23 Blackhorse Lane is an important route for walking and cycling and connects to a large catchment area. Where sites have frontage onto Blackhorse lane they will be expected to set back and create space for environmental improvements along the road, including the provision of segregated cycle facilities, landscaping and tree planting and good pavement widths. Clear standards are given for minimum widths for footways (1.8m with 2.0m preferred), Cycle tracks (1.5m) and two-way cycle tracks (3m).
- 5.8.24 New residential development will be expected to be car-free except for the provision of spaces for disabled car users. Suitable space for loading and service access for residential development will help to make sure that the area works well and that safe access can be maintained. Deliveries should be consolidated and made by cargo bike wherever possible and any parking must support EV charging.
- 5.8.25 The street network should be designed to reduce the reversing of large vehicle on public streets due to the risks involved to pedestrians and cyclists. Creating clear highway loops which allow vehicles to enter and then leave the SIL without turning around will be a positive approach.
- 5.8.26 The area should generally be treated as a low traffic neighbourhood. Cyclists should be protected through reducing other vehicular movements and where that is not possible, through segregating cyclists from vehicles. Cyclists in the same street as HGVs should be protected through the provision of protected routes where necessary, particularly in situations where a cycle contraflow may operate on a one-way street. Speed limits for streets within the site should generally be set at 5mph with suitable traffic calming.
- 5.8.27 Changes to the street network are likely to be gradual rather than comprehensive given the different land ownerships. It will be important for the developers of individual sites to demonstrate that the wider network beyond their site can continue to function safely and support their proposals.
- 5.8.28 Recognising the challenges of the climate emergency, permeable paving, soft landscaping and tree planting should be prioritised when considering public realm improvements.

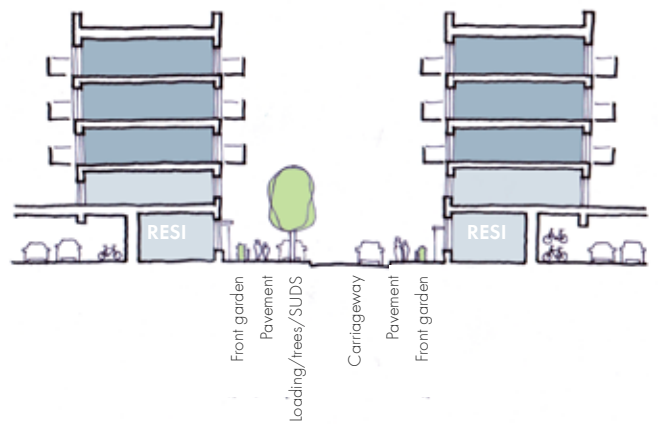
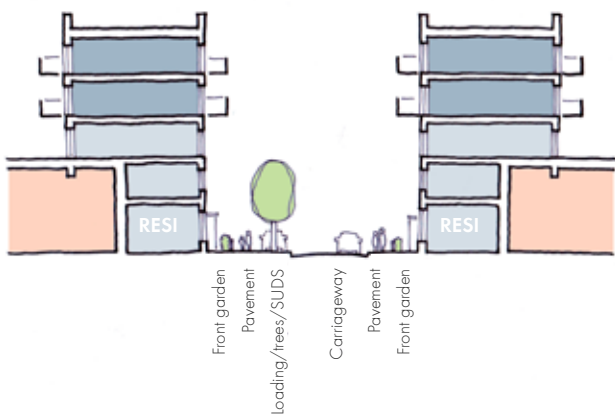
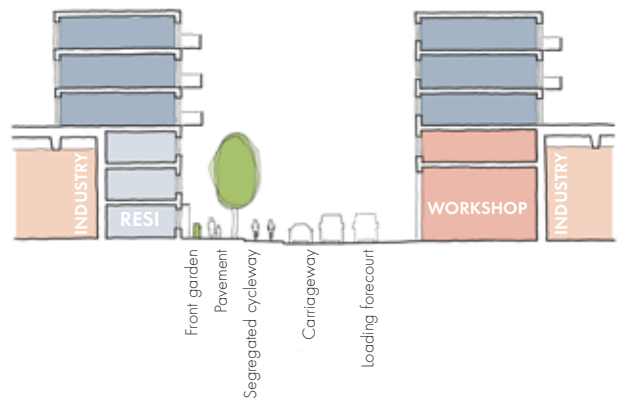
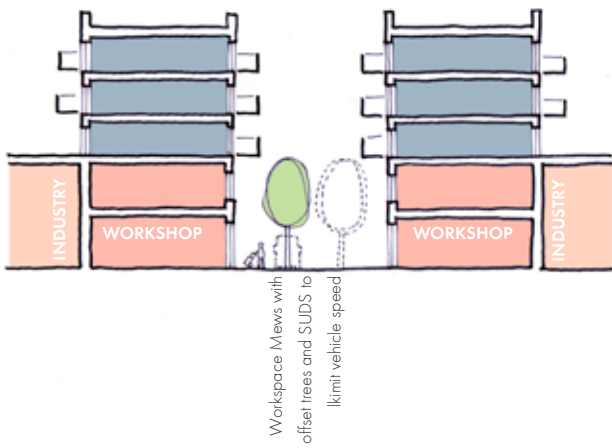
Street sections

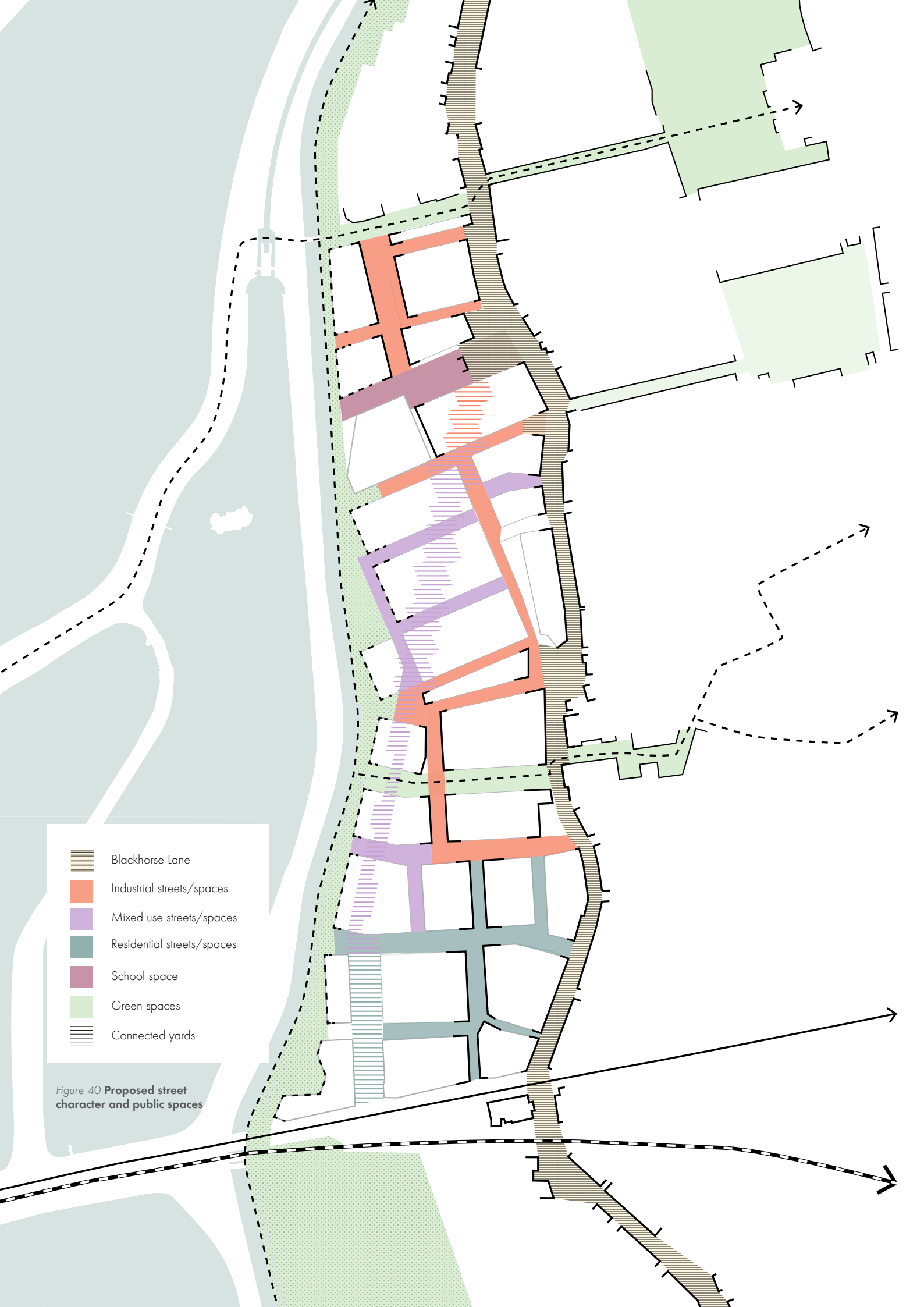
5.8.29 Within the overall development of the area the design of the streets should respond to the nature of the uses and the role of the space within the street hierarchy established above. The aim should be to create a robust and functional environment which meets the needs of industrial uses, whilst also reflecting the fact that access by walking and cycling is also a particular characteristic of this area and the surrounding context and so should be included in design considerations to create a safe environment.

5.8.30 A further key principle for the public realm throughout the area should be to introduce significant amounts of tree planting, permeable surfaces and SUDS wherever possible. This is important to support biodiversity and sustainability aims, and will contribute significantly to the attractiveness of the spaces created.

5.8.31 The following examples are provided to illustrate the range of conditions which may be developed through the more detailed sub-area masterplans. All street designs should meet the minimum standards set out on the previous page.







-  Blackhorse Lane
-  Industrial streets/spaces
-  Mixed use streets/spaces
-  Residential streets/spaces
-  School space
-  Green spaces
-  Connected yards

Figure 40 Proposed street character and public spaces

5.9 Public realm and placemaking



Responding to engagement: Improving and increasing the public space is a priority of both the wider community and many of the businesses operating within the SIL. This section identifies six place-specific opportunities to deliver on these ambitions.

Establish a continuous greening route along the waterside, taking advantage of positioning next to the Wetlands. This should be designed as a continuous walking and cycle route with high quality amenity space along the way.

Create a series of public spaces following the exclusion zone for the Thames Spine Tunnel.

Opportunities for de-culverting or creating a green corridor, along the Dagenham Brook.

Develop a network of streets that can provide good vehicular access for servicing, whilst also creating a better environment for people walking and cycling.

5.9.1 One of the key benefits of investment and development of the SIL would be enhancing the public space. The feedback from engagement indicated that the streets and spaces between buildings is in a poor state, making the site uninviting and at times unsafe. This is of growing importance amongst businesses as many of them take on a more customer-facing role and are keen to attract people.

5.9.2 There are three place-specific opportunities to create a characterful and functional public space: the waterside route; east-west green routes; and a series of public space through the centre of the SIL. These are set out in more detail on the following pages.

5.9.3 Open space needs to feel generous, accessible and safe to use, drawing in the wider community to encourage wider integration.

5.9.4 Development within the SIL will need to provide adequate open, green and play space to meet the

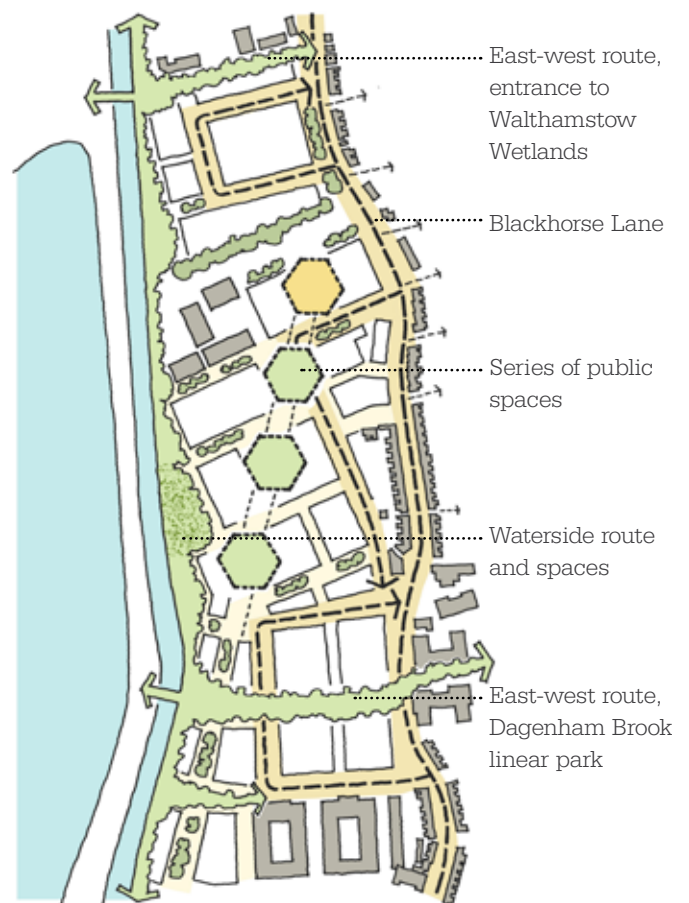


Figure 41 Proposed public space and placemaking opportunities

needs of the growing community. Proposals will need to comply with the London Plan (Policy G4 Open Space / D8 Public Realm) and draft Policies 56 - Delivering High Quality Design / Policy 58 Residential Amenity Space Standards / Policy 50 Promoting Healthy Communities and Policy 63 Active Travel - where relevant.

5.9.5 Beyond these, much of the opportunity to create high quality public space comes down to the design of the streets. More information can be found in section 5.6.



Responding to engagement:
The second top priority of the community is 'Maximise the waterside and adjacency to the Wetlands' with 73% in support. The framework looks to increase access and views to the Wetlands, while minimising impacts on the ecology.

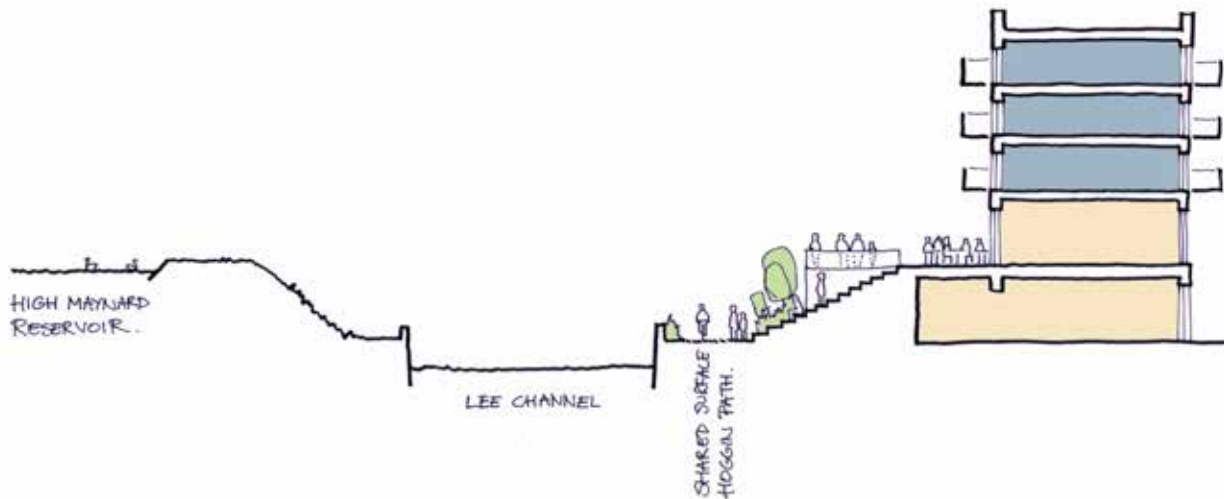
Walthamstow Wetlands

- 5.9.6 Walthamstow Wetlands is a 211 hectare nature reserve adjacent on the western border of the SIL, with an entrance just north of Lockwood Way. The Wetlands offers a significant placemaking opportunity, through improving views, access and prominence of the vast green space.
- 5.9.7 While there are many benefits to having this expansive green space next-door there are also limitations. Recreation on and around the Wetlands is limited so as to not impact on bird species. The Wetlands is only open between 10.20-17.00, does not allow dogs and does not include opportunity for play or sport.
- 5.9.8 There is an aspiration amongst the local community to have a new entrance into the Wetlands from the Blackhorse Lane area. The framework supports a new bridge in alignment with the Dagenham Brook, but acknowledges that there are constraints in terms of ecology which will require further investigation.



Figure 42

Above: A sketched section of the waterside route
Top: A precedent image of a route and waterside space at Here East
Middle: A photo of a path through the Wetlands
Bottom: A precedent image of a waterside space at Kings Cross



Waterside route and spaces



- 5.9.9 There is a major opportunity to benefit from the adjacency to Walthamstow Wetlands by creating public realm that takes on the natural character and enjoys views out to the expansive Wetlands.
- 5.9.10 A new continuous route should be created along the site's western border, along the water. At a minimum, buildings should be set back 8m from the Flood Relief channel. This waterside route has been created through the development to the south of the SIL. The route should be continued and connected with the access to the Wetlands to the north, knitting it into a wider green network. In addition to acting as a pedestrian and cycle route, this space could be used as a promenade or linear park, incorporating urban greening and offering amenity and play space along the way. There is strong precedent for this type of space across the Lea Valley and London's canal network. To make a high quality space, consideration should be given to the treatment of the Lee Flood Relief Channel, ideally working with Thames Water to understand opportunities for additional greening.



- 5.9.11 Given the sensitive habitats at High Maynard Reservoir, most activity should be kept at lower levels, below the bund. When considering raised public spaces, it is important to balance the desire for views over the reservoirs with the important need to minimise potential for visual and noise disturbance to wetland birds through engagement with Natural England.



- 5.9.12 Generally development is up to the individual landowners and on their own timescales, however in this case the Council is keen to work with landowners to open up this route in advance of some areas of development, in order to provide a continuous route and public amenity for the local community.

Figure 43

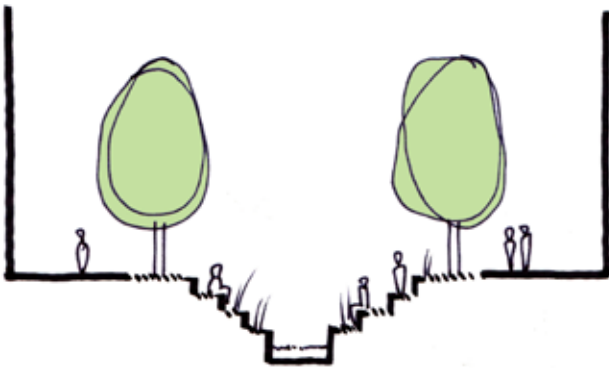
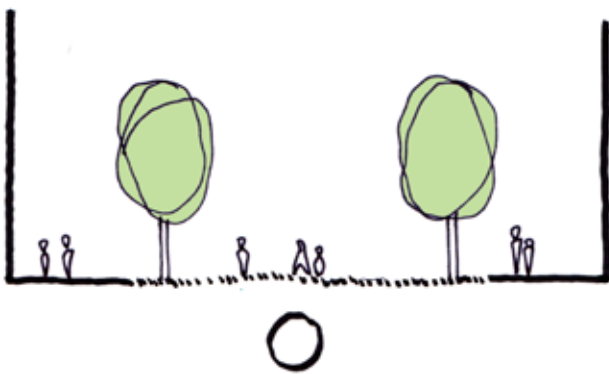
Above: A sketched section of the waterside route
 Top: A precedent image of a route and waterside space at Here East
 Middle: A photo of a path through the Wetlands
 Bottom: A precedent image of a waterside space at Kings Cross

Series of public spaces

- 5.9.13 One of the key physical constraints of the site is the Thames Spine Tunnel, which requires easements on either side. This constraint can also be seen as an opportunity to create a series of public spaces.
- 5.9.14 Yard space is a key operational requirement for industrial buildings. The engagement process indicated that 62% of businesses use a yard or outdoor space. These spaces tend to be used flexibly across the day for a variety of uses: for loading/unloading, parking, customer-facing activity and for working. Design of the spaces should therefore support all of these uses, to accommodate current and future industrial tenants.
- 5.9.15 Given this changing pattern of use, yards should be designed to be used flexibly at different times of the day and the week. For example, as a number of breweries do at the moment, they could be used for loading in the week, while being used as a taproom patio in the evenings and weekends.
- 5.9.16 Where new homes are co-located with industrial uses, the spaces should be designed as high quality amenity spaces to support the community. The spaces should provide green space, be comfortable with good sunlight, and provide play for all ages. They should be fronted with active ground floor frontage and uses which spill out and activate the space. They should feel safe and accessible to everyone.



Top: A precedent image of a yard at Hackney Bridge
Middle: A precedent image of Signature Brew's yard
Bottom: A precedent image of a green space in Boulogne Billancourt



East-west green routes

- 5.9.17 The Dagenham Brook runs under the site in a culvert running east-west to the north of Hookers Road. On the opposite site of Blackhorse Lane there is planning permission to redevelop the site and de-culvert the brook, creating ecological benefits and a focal point for the public realm.
- 5.9.18 A new green link could be created along the culverted Dagenham Brook, which could be left underground allowing for a pedestrian environment above, or could be de-culverted and greened.
- 5.9.19 This space could reflect the access to the Wetlands to the north, an existing east-west green route. These two routes would join via the waterside route, knitting into a wider green network in the area.
- 5.9.20 There is also potential for the Dagenham Brook green link to lead to a bridge and new entrance into the Wetlands. This idea is strongly supported by the local community, but would need to undergo feasibility testing, particularly regarding impacts on the bird species in the West Reservoir.



Figure 44

Top: Sections through the Dagenham Brook Corridor showing how the area can either operate as a green space above the existing culvert, or accommodate a de-culverted approach. Given the need for gradual phased delivery the de-culverting may need to take place as a later stage of work once all surrounding sites have been delivered. **Middle:** A photo of the entrance to the Wetlands **Bottom:** A visualisation from the Blackhorse Yard scheme, showing a de-culverted Dagenham Brook

Podium and rooftop amenity space

5.9.21 Development within the SIL will need to provide adequate open, green and play space to meet the needs of the growing community and to meet policy standards.

5.9.22 It is generally preferable to provide amenity and play space at ground level, making it accessible to everyone. However, given the need to prioritise servicing of industry at ground, other forms of amenity space may be needed to meet the required play and space standards, as well as to create a high quality place.

5.9.23 Terrace and roof space should be considered, as well as the spaces above industrial podiums. These spaces can add to the quantity and variety of places on offer in the area. And many of these elevated spaces have the added benefit of views over the wetlands and to the central London beyond. Consideration should be given to the tenure mix to avoid segregation of spaces.

5.9.24 Given the need to move through a building to access these space, management and access arrangements would need to be carefully considered.



Top: A precedent image of a rooftop garden at Southbank Centre
Middle: A precedent image of a rooftop space at Netil House
Bottom: An aerial image, showing the potential view from the SIL



Blackhorse Lane

- 5.9.25 As part of the Enjoy Waltham Forest programme, there are plans underway to improve Blackhorse Lane between Blackhorse Road Junction and Hookers Road. This will include: fully segregated cycle tracks; a new raised pedestrian and cycle crossing; plants and greenery along the route; better paving materials; new blended “Copenhagen” crossings at side roads; wider footways; and a narrowed carriageway. Improvements could be extended along Blackhorse Lane to the north of Hookers Road through the process of development in the SIL.
- 5.9.26 Development on the Blackhorse Lane edge should be set back to make space for wider footways, joined up cycle lanes and street trees. Any new buildings should also provide active frontage onto Blackhorse Lane.
- 5.9.27 The access roads into the SIL should be designed as key arrival points, considering views into the SIL. Junctions along Blackhorse Lane should provide blended “Copenhagen” crossings which extend the pavement across the road to encourage prioritisation of people crossing at side roads.
- 5.9.28 There are currently zebra crossings just south of Big Creative Education and north of Eden Girls' School. These could be improved with widening of the footway/public realm around the crossing. Additional crossings could be considered in the alignment of the Dagenham Brook and at the entrance of the Wetlands, with a focus on safety and comfort.
- 5.9.29 Any improvements should be designed in alignment with the Mini-Holland Design Guide.

Figure 45

Top: A visualisation of proposals for the section of Blackhorse Lane between Hookers Road and Forest Road from Enjoy Waltham Forest
Bottom: A Blended or 'Copenhagen' crossing, Enjoy Waltham Forest

Block frontages

5.9.30 In order to create a coherent place it is important that the streets and spaces created are framed by active frontages and this needs to be coordinated across ownership boundaries. Figure 44 sets out an overall approach which should be developed and tested through the sub-area strategies.

5.9.31 The following principles should be applied to the planning of frontages:

- Main routes and public spaces should always be framed by active frontage, with particular focus given to the primary spaces within any development.
- Buildings facing each other across a street or space should be expected to deliver equivalent frontages, rather than having significant frontages facing blank backs.
- Industrial frontages are expected to relate to industrial streets and yards, with a clear distinction from residential streets and spaces which provide access to dwellings.
- Boundaries between plots within a block need to consider whether they provide a party wall condition to enable continuity of building frontage along a street, or whether they provide a courtyard or garden space within the core of an urban block which allows for amenity and also dual aspect dwellings, particularly for smaller buildings.



Figure 46 Block plan indicating primary and secondary frontages as well as building backs



Figure 47 Photos showing the visual character of Blackhorse Lane SII



Visual character

5.9.32 The SIL has a clear industrial and creative character. One of the key messages from engagement with the local community was that people would like this character to be retained and not lost in any future development.

5.9.33 While modern, fit for purpose industrial space will be an improvement, the SIL's attributes should inform the design of any future buildings to retain its character:

- **Activity:** Partly, the SIL's industrial character of the area is shaped by the activities taking place on site and the visibility of those activities. Where ever possible, industrial uses should be at ground level fronting the street with activity. At times glazing could be used to reveal operational making areas. Establishing views into industrial yards will also help to celebrate the industrial nature of the SIL.
- **Rooflines:** Pitched rooflines are typical of industrial buildings and prevalent in the SIL. Equally so, there are quite a few buildings, particularly in the northern half of the SIL with flat roofs.
- **Materials:** Materials within the SIL have been chosen to be robust and cost-effective. Across the SIL we see repeated use of brick and corrugated metal.
- **Function over form:** Built with functionality in mind, simple and repetitive form, shape and facades are prevalent. This is also true of the public realm.
- **Scale:** Industrial uses often require double-heighted ceilings and large entryways for accommodating lorry servicing. These proportions are characteristic of industrial areas.
- **Signage:** In recent years, there have been a number of identity and wayfinding projects in and around the SIL which have made creative use of typography and signage. Font, colour and material are used to create a sense of identity and to convey the creative nature of the area.

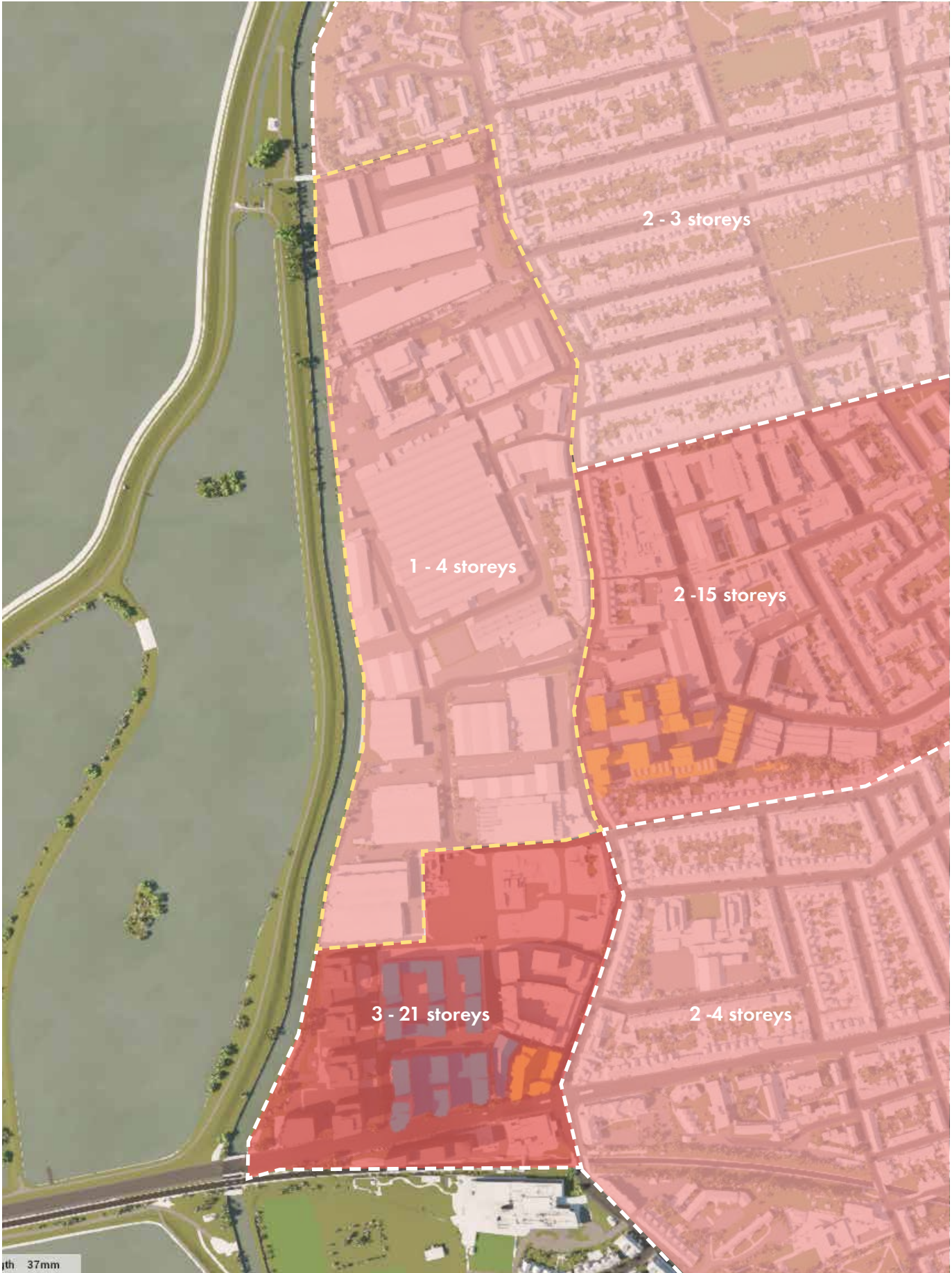


Figure 48 A plan of prevailing existing heights in the area

5.10 Height and massing strategy

The height and massing of any future development should take a design-led approach, responding to the context.

Key guiding principles include: creating a sensitive frontage on to Blackhorse Lane, having lower buildings fronting on the Wetlands, protecting existing neighbours and responding to the industrial intensification strategy.

This is seen as an area of transformation, and therefore well located Tall buildings (18 storeys +) and Taller buildings (10-17 storeys) of exceptional design quality will be supported subject to meeting policy requirements.

- 5.10.1 The immediate context for the building heights around the study area is very mixed. The historic position has been for low rise residential and industrial development on three sides and the open wetlands to the west. However, over recent years this has rapidly changed, with the development of a significant cluster of taller buildings in the area around the station and newly consented taller buildings to the east of Blackhorse Lane along the Dagenham Brook Corridor (see p 42 for details). This aligns with wider trends across London and in the Lea Valley, including Tottenham Hale on the opposite side of the Wetlands.
- 5.10.2 This section of the framework sets out the key considerations including the key sensitivities and opportunities as well as guiding principles which should shape the approach to heights and massing at Blackhorse Lane SIL. It also provides guidance on the requirements for potentially introducing Taller and Tall buildings. Any development should align with London Plan Policy D9 (Tall Buildings) and emerging LP1 Policy 8 (Character-led Intensification) and emerging LP1 Policy 57 (Taller and Tall Buildings).



Figure 49 A VuCity view showing the changing context for height. Consented schemes are shown in yellow, schemes under construction in blue and recently built in dark grey. The SIL boundary is shown in red.

Key considerations: sensitivities



5.10.3 The Blackhorse Lane SIL is located on the edge of the Lea Valley. The open valley, and some playing fields and parks adjoining it, is designated as Metropolitan Green Belt, and offers a significant open space within the urban area. The presence of the reservoirs has attracted a notable bird population and the area close to the site is also designated as Site of Special Scientific Interest and RAMSAR / Special Protection Area in response to this. The recent Walthamstow Wetlands project has, for the first time, opened up the paths through the site for the general public, but excludes dog walking in view of the significance of the bird population.

5.10.4 Walthamstow, and Haringey across the valley, have no conservation or heritage assets which are located in close proximity to the SIL. The St James Conservation area is approximately one kilometre away from the southern end of the SIL. Similarly, the Lloyd Park Conservation Area is about one kilometer east (beyond the extents of the map above). The terrain and street pattern doesn't offer clear lines of sight between these Conservation Areas and the SIL.

5.10.5 There are a limited number of listed buildings in the wider area, although as with the conservation areas, these are all at a significant distance from the SIL. The key buildings include the Ferryboat Inn at Tottenham Hale, the Church of St Michael and all Angels at Palmerston Road and Clock House on Mission Grove which are all listed as Grade II. In terms of Locally Listed buildings, the only one in the vicinity is L. Rodi Café, 16, Blackhorse Lane E17.

Key considerations: opportunities



5.10.6 Forest Road, which becomes Ferry Lane as it crosses the valley, links together two significant new areas of development, around Tottenham Hale and Hale Wharf in the west and around Blackhorse Lane station in the east. The Blackhorse lane area is significant in this context as having been previously removed from the SIL to create an area of housing growth and delivering a notable change in scale and intensity. The character of the architecture, the street names and art in and around the developments reflect the industrial heritage of the area.

5.10.7 The SIL area benefits from good access to open space in a number of forms. The access to the Wetlands is directly from the northern edge of the area and offers significant scope for walking and cycling as well as connections to the wider Lea Valley north and south. At a local level Higham Hill Recreation Ground (250m), Trencherfield allotments (220m), and the Douglas Eyre playing fields (400m) between them offer a range of facilities to meet different requirements.

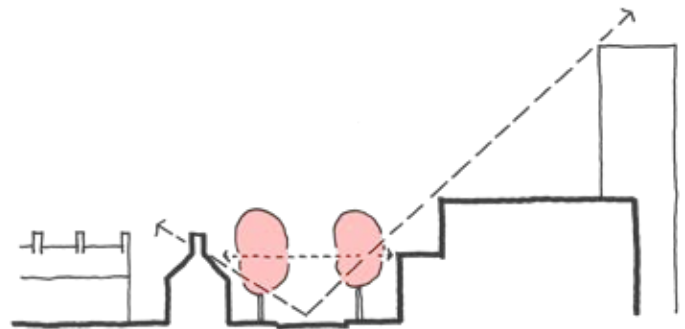
5.10.8 The SIL area is located within easy walking and cycling distance of the neighbourhood centre offering shops and amenities. Being short walking distance from amenities enables any future development to be a sustainable '15-minute neighbourhood'.

5.10.9 It's also a short distance from Blackhorse Road station which offers both tube and overland connections. This access is further supplemented by dedicated cycling infrastructure along Blackhorse Road and connecting bus services, enabling sustainable transport.

Height and massing key principles

Create sensitive frontage onto Blackhorse Lane

5.10.10 The existing Blackhorse Lane frontage is patchy and inconsistent. Whilst the eastern side of the street features a strong building line which establishes good active frontage and streetscape, the western side varies significantly. Of the existing buildings, C&S builders merchants and Uplands House work with the short terrace of housing to create an element of frontage, but both the Forest Estate in the south and the Delta Group/Lockwood Way area in the north are set back and do not engage with Blackhorse Lane.

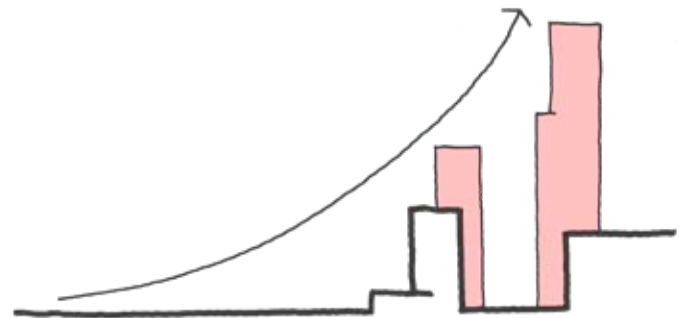


5.10.11 Developing new buildings fronting onto Blackhorse lane at a scale which responds sensitively to the existing character will help to create a positive street character and help to improve safety for active travel. Creating a more active presence for workspace on the street frontage would also have significant benefits in terms of reinforcing the nature of the area and enhancing passive surveillance through the day. Tall and Taller buildings (where justified) should be set back from this frontage, allowing a low- to mid-rise character to be developed.



Lower buildings on to the Wetlands

5.10.12 The Wetlands edge is an important and sensitive wildlife habitat that needs to be respected and protected. Buildings in this location should avoid creating a tall cliff edge or a continuous wall of development. Well considered height and spaces between buildings will help reduce the impact from an ecological point of view and improve the visual impact from across the wetlands. Buildings should step down in height and new public spaces should be introduced along the Wetlands Edge. Design, materials and lighting will also be important in this location to minimise impacts.



Protecting existing neighbours

5.10.13 The existing industrial areas are bordered by a number of different neighbouring uses, each of which provides an element of constraint in terms of new taller buildings:

- Flats and houses to the north of Lockwood Way on Riverside close, including some with relatively short gardens backing onto the site;
- Eden Girls' School;
- Homes facing towards the site fronting onto the upper part of Blackhorse Lane north of St Andrews' Road;
- Homes fronting Blackhorse Lane with gardens backing onto the site from Uplands Avenue down to Priestley Way; and
- New homes south of Hookers Road.

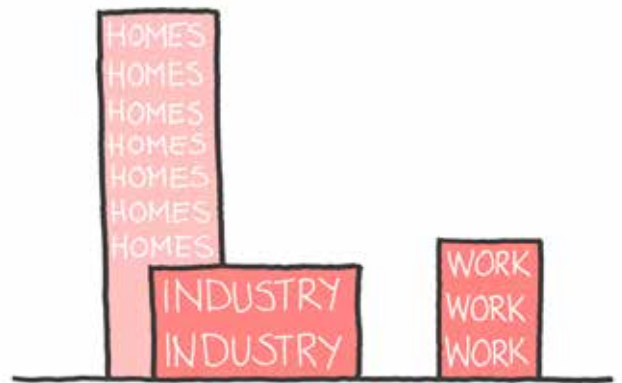
5.10.14 It will be important to protect the amenity of these existing properties by considering the impact of massing in close proximity to them, factoring in both daylight and sunlight issues and also overlooking.



Intensification strategy

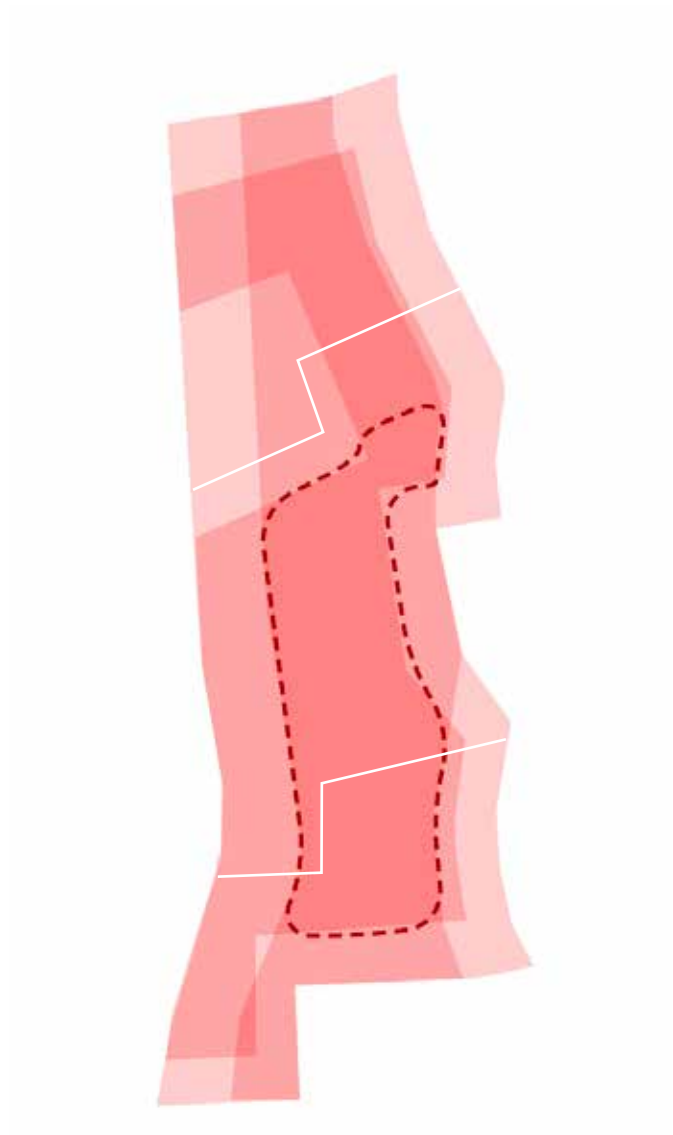
5.10.15 The intensification strategy influences the approach to height and massing. Buildings that are wholly industrial (not mixed use) tend to be low to mid rise, as industry relies on good servicing access. While goods lifts can make working on upper floors feasible, it becomes more difficult to provide adequate servicing the more floors that are introduced. As a result, stacked industrial buildings tend to be between two and six storeys and are rarely taller.

5.10.16 The strategy for the SIL is to intensify industry in the north and east, with the focus being to increase industrial floorspace in these areas as set out in section 5.1. Therefore, height and massing should be lower in these areas to provide the building types which best cater for the needs of industrial businesses.



Consolidated approach

- 5.10.17 Building up the layers of factors which have a distinct geographical element produces a diagram that helps to establish key zones in which Tall and/or Taller buildings could either be more or less appropriate. The southern and central sub-areas both include zones which are considered more suitable for the potential introduction of a limited number of Taller and/or Tall buildings (where justified in accordance with London Plan Policy D9 (Tall Buildings) and emerging LP1 Policy 8 (Character-led Intensification) and emerging LP1 Policy 57 Taller and Tall Buildings)).
- 5.10.18 The northern sub area is considered less suitable for Tall and Taller buildings given the lower accessibility and the wider context of adjoining uses. It's suitability for intensification of industrial uses is a further factor which would be likely to mitigate against Tall and Taller buildings.



- Study area
- Primary Route
- Open green space frontage
- Sensitive frontage
- Important frontage
- Areas of improved public space
- Existing buildings
- Existing buildings of scale:
- Category A: 6-9 storeys
- Category B: 10-13 storeys
- Category B2: 14-17 storeys
- Category C: 18+ storeys
- Opportunity for taller buildings



Figure 50 Height and massing considerations

Tall and Taller buildings

5.10.19 This is seen as an area of transformation, and therefore well located Tall (18 storeys +) or Taller buildings (10-17 storeys) of exceptional design quality may be considered appropriate subject to London Plan Policy D9 (Tall Buildings) and emerging LP1 Policy 8 (Character-led Intensification) and emerging LP1 Policy 57 Taller and Tall Buildings).

Tall and Taller buildings require generous open space

5.10.20 Tall and Taller buildings may be considered in areas of the masterplan when substantial and well-designed open space is provided to balance the impact of increased density.

Appropriate massing for different street widths / street types

5.10.21 Building heights should change across the masterplan depending on the width of street. Narrower streets should consider lower massing while wider streets can be used to justify increased massing. Buildings with recessed top floors, open corners or broken/ fragmented rooflines should be considered to ensure streets are unique and distinctive in their character and are appropriate in scale.

Responding to townscape and skylines

5.10.22 Tall/Taller buildings, and clusters of Tall/Taller buildings have dramatic impacts on the existing skyline and views. Testing needs to be carried out on potential locations and geometry to tall buildings, considering views from the four areas: the immediate setting of the SIL; the area around Blackhorse Road Station, which includes new residential development; Walthamstow Wetlands, to the west; and the hinterland of established residential development to east and north of the site. Views from/across the Wetlands are particularly important and sensitive.

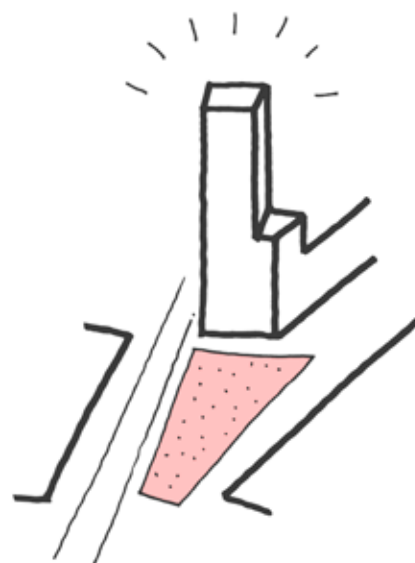
5.10.23 Any planning applications should be supported by a townscape and visual impact assessment (TVIA) which will illustrate the effects on a wide range of near, mid-distance and long range views, from locations which have been agreed with LBWF.

Tall and Taller buildings used for wayfinding

5.10.24 Tall or Taller buildings can help people easily navigate around the site. This could be important to guide people to key public spaces or uses and can be used to denote the end of a long route. In a wider context Tall or Taller building can help signify the location of the site and can act as an important marker as people move through Waltham Forest.

Views from Tall or Taller buildings

5.10.25 Unique views will be obtained from buildings higher up. In special circumstance where Tall or Taller buildings are supported spacious distribution between taller elements across the masterplan is essential to ensure that they do not impact on their access to these views. The space between Tall or Taller buildings will be rigorously scrutinised.



Responding to urban form

- 5.10.26 The impact of buildings on the ground floor conditions can create a micro climate that needs to be managed and tested carefully before they can be supported. The Lee Valley provides a unique wind condition which needs to be considered where there is an increase in bulk and massing. Building heights will impact on the light levels of public space and streets that needs to be reduced through considered design. Testing is needed to ensure that principals are established are acceptable at this level.

High Quality Architecture and Design for Tall or Taller buildings

- 5.10.27 Tall or Taller buildings will have to reach exceptional design standards to be fully supported. Their massing as well as their detailing and materials will be assessed. Visually interesting proposals and forms are encouraged to be explored to ensure a unique and characterful architecture and skyline are delivered creating a distinctive place.
- 5.10.28 Where Taller and Tall buildings are proposed, they should come forward as positive design intentions. Where justified, they should contribute positively to their context and be part of a successful composition of building heights in line with the requirements of the London Plan and emerging Local Policies.

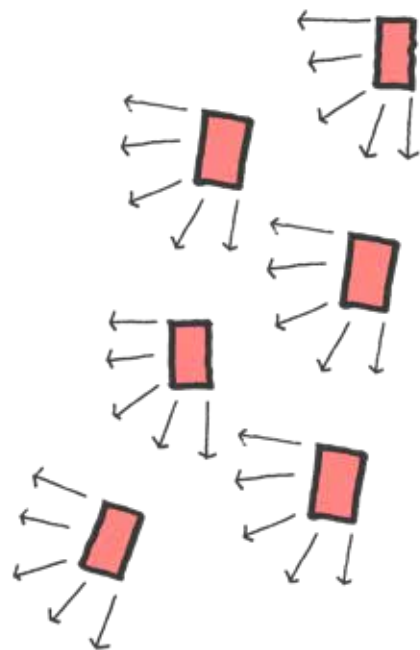




Figure 51 Proposed height and massing strategy

Height and massing strategy

- 5.10.29 The masterplan proposes that significant new public spaces are created in the alignment of the Dagenham Brook, along the western edge facing the Wetlands and a series of spaces in the centre of the SIL along the path of the Thames Water spine tunnel. Height and massing should respond to this public space strategy, potentially using a limited number of Taller and Tall buildings to mark important places, contributing to placemaking and helping people to navigate
- 5.10.30 This approach has been tempered with the key principles and constraints, set out on the previous pages, to identify potential focal points where a limited number of Taller and Tall buildings (figure 47) could come forward. Taller and Tall buildings (if justified) could be focused along the Dagenham Brook, at the confluence of the Dagenham Brook and waterside route, and around key yards and spaces, helping to mark these as important places within the wider area.
- 5.10.31 Any development should align with London Plan Policy D9 (Tall Buildings) and draft Policy 8 (Character-led Intensification) and Policy 57 (Taller and Tall Buildings) alongside the design focused policies included within the London Plan and emerging LP1.

6 Sub-area strategies

6 Sub-area strategies

6.1 Sub-areas

5.10.32 The SIL has been delineated into three sub-areas for more detailed consideration. As noted in section 2.21, the sub areas respond to the character, form and ownership of the different parts of the area, with the north being the focus for industrial intensification and the central and southern areas being more suitable for co-location of different uses.

5.10.33 The following sections provide further guidance in terms of movement, green infrastructure, land use and phasing/delivery for each sub-area.

5.10.34 For each sub-area, this section sets out a high-level approach in terms of:

- Key issues and opportunities
- Existing site and minimum industrial floorspace
- Movement and industrial servicing strategy
- Land use and agent of change
- Estimated development capacity
- Public and green space
- Key urban principles

5.10.35 Coordination between landowners within each sub-area will allow for the creation of a coherent, functional place, taking into consideration routes, edge conditions, built form and use. The next steps section (7.2) explains the process for progressing development within each sub-area.

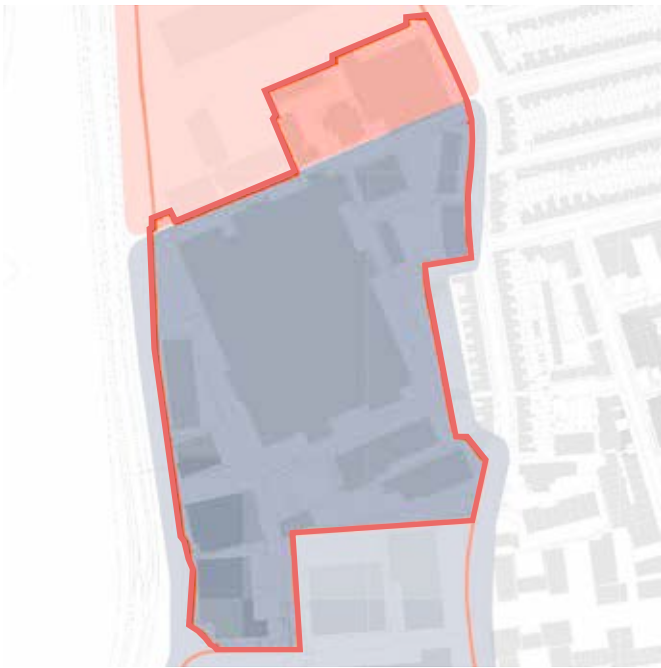
5.10.36 In total, the industrial capacity is as follow:

- Existing capacity: 76,638 sqm
- Industrial use delivered in SIL land: 48,000 sqm
- Industrial capacity delivered in LSIS: 46,000 sqm
- Total industrial capacity: 94,000sqm



Northern sub area

5.10.37 The northern sub-area consists of Lockwood Way, Delta Group and Eden Girls' School. The three estates are held in separate ownerships with independent access arrangements. Whilst Eden Girls' School is expected to remain in place for the foreseeable future, the rest of the sub-area will be the focus of industrial intensification along with the northern part of the central sub-area.



Central sub area

6.1.1 The central sub-area includes Uplands and part of Forest Trading Estate. Access is more integrated, in this area. There is one large consolidated ownership holding much of this area, alongside a number of smaller parcels held by different owners. The north east of this area is included in the retained SIL for industrial intensification, while the south and west is more appropriate for the co-location of new uses with industrial as part of the revised LSIS designation.



Southern sub area

6.1.2 The southern sub-area includes Forest Trading Estate and Hookers Way. It borders new residential development in the Housing Zone to the south. This area is held in four main ownerships. Within this area, businesses and industrial floorspace should be retained, while introducing the potential for co-location of other uses within the new LSIS designation to strengthen the connection with the existing housing zone to the south.

- Intensify and consolidate industry
- Retain industry and co-locate other uses



Figure 52 Aerial image of the northern sub-area, Google Maps 2021

6.2 Northern sub area strategy

- 6.2.1 The northern sub-area is formed of three land ownerships - from north to south The Lockwood Way estate owned by Waltham Forest Council, the Delta Group site and Eden Girls' School. The two industrial sites are different in character from each other, with the Lockwood way area occupied by a number of small businesses with an average unit size below 500sqm whilst Delta Group occupies nearly 10,000sqm as a single business. Eden Girls' School an enclosed school premise with its own gated access to the school buildings off of Blackhorse Lane.
- Key issues and opportunities**
- 6.2.2 The area is not well integrated into the wider area and there is good potential to offer enhancements through providing active frontage onto Blackhorse Lane, retaining the existing line of trees.
- 6.2.3 The area has low-rise housing to the east and to the north, which should place limits on the scale and bulk of buildings. It is also the area of the SIL which is furthest from the stations, and so has the lowest accessibility for public transport, further suggesting that overall density may be moderated.
- 6.2.4 The northern access to the Walthamstow Wetlands is along the northern edge of the area. This is lined with hedges on both sides, giving a pleasantly rural character. Providing some passive surveillance onto this route may be beneficial, but the option to deliver an alternative connection to the Wetlands via a more public street link could also be beneficial.
- 6.2.5 All three parcels turn their backs on the waterside. Any scheme for redevelopment should include provision for a public route along the western edge, connecting into the path which continues north up the Lea Valley.
- 6.2.6 Some significant element of land levelling has taken place within the Delta Group site with a substantial drop from natural road level down into the site. This could potentially provide an opportunity for a creative approach to levels which uses this change to accommodate basement areas or larger volume industrial space. The change in levels also needs to be considered in terms of potential future connections through to the Lockwood Way site.
- 6.2.7 Eden Girls' School forms a key constraint in terms of bulk, massing and overlooking. The school is not likely to be relocated or redeveloped in the foreseeable future. Whilst redevelopment is unlikely, an urban layout which retains the possibility of establishing a continuous north-south route connecting through to the central sub area in the future would be welcomed.
- 6.2.8 Lockwood Way's existing street network forms a T with a strong north-south link across the site. A coordinated plan for the Delta Group site which connected into this form or anticipated a future connection would create a simple loop providing access for industrial traffic in a safe manner and good pedestrian/cycle access.
- 6.2.9 Whilst it would be possible for each area to be redeveloped in isolation to create more dense industrial space and release land, there would be value in a collaborative approach in terms of securing better servicing which in turn will help to create the safer street environment.

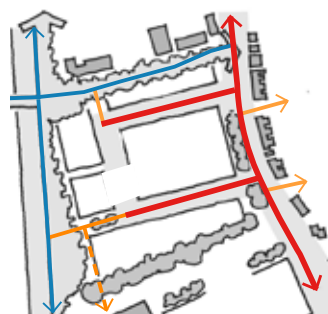


Existing sub area

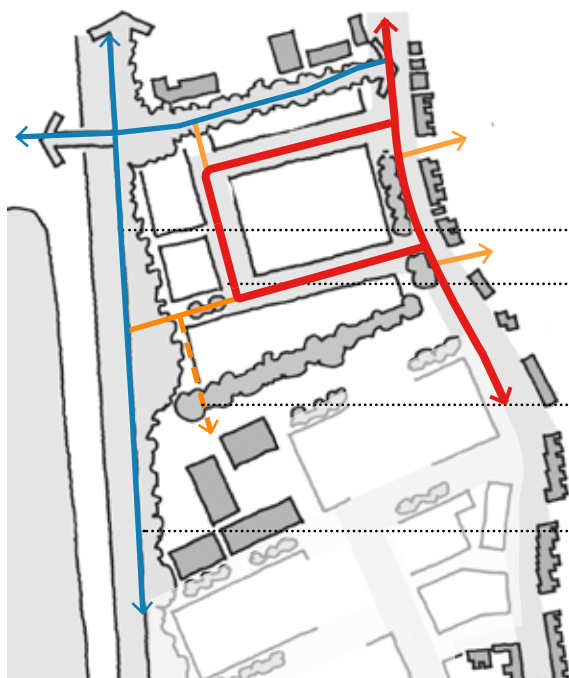
- 6.2.10 The northern sub-area is split into three distinctive areas. The northern part - Lockwood Way comprises a series of small industrial units occupied by a range of different businesses and sloping gently following the natural terrain. The middle part is occupied as a single site by Delta Group. The south is Eden Girls School.
- 6.2.11 The existing industrial floorspace is 15,240sqm. Any re-development of this wider sub-area should seek to deliver an increase in industrial floorspace and at a minimum ensure that overall industrial provision in the sub-area remains above 15,000sqm. Floorspace has calculated using OS mapping to determine to Gross External Area (GEA) and multiplying that by the number of floors for every building within an industrial use class (E(g)(iii), B2 and B8). Mezzanine's have not been included. Outdoor space which is primarily used for industrial work is also included (subtracting circulation, parking and any redundant space). The School is not included as industrial space because it is not in industrial use. This method is consistent with the Council's approach across the rest of the borough.
- 6.2.12 This section demonstrates how the area could be redeveloped in full, but the block structure and movement strategy have been designed to accommodate partial delivery or the retention of some buildings.

Unit	GEA sqm industrial space
10 Lockwood Way	640
09 Lockwood Way	882
08 Lockwood Way	440
08 Lockwood Way outdoor	577
07 Lockwood Way	553
06 Lockwood Way	639
05 Lockwood Way	437
04 Lockwood Way	327
03 Lockwood Way	323
02 Lockwood Way	324
01 Lockwood Way	322
156 Black Horse lane	2292
157 Black Horse lane	5291
155 Black Horse lane	888
153 Black Horse lane	665
154 Black Horse lane	740
	15,240

— Land ownership boundaries



Option 2: Following stakeholder feedback, an option has also been considered which does not join the two access routes. While this arrangement may suit certain occupiers, it does not achieve the same benefits in terms of improving movement flows, safety and placemaking.



- Waterside route and green space
- Main access loop for industrial servicing
- Safeguarded future connection
- Waterside route delivered through engagement with the Eden Girls' School

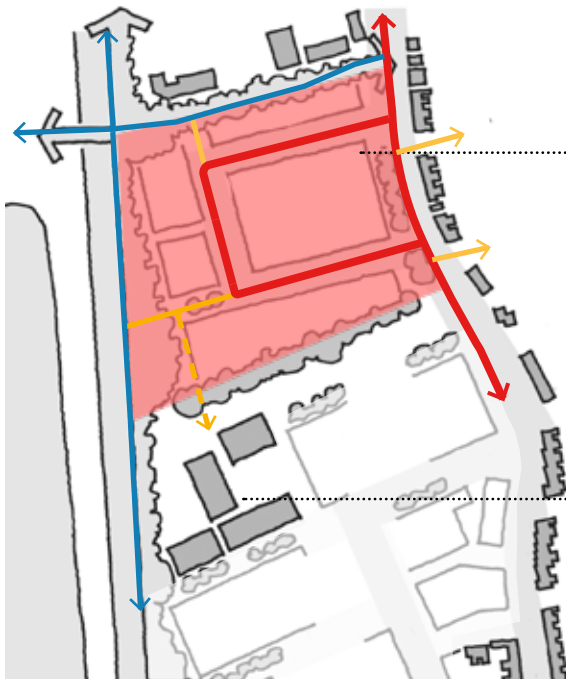
Movement strategy

- 6.2.13 The existing northern sub-area currently operates as two separate cul-de-sacs accessed from Blackhorse Road. The key opportunity to improve the way that the area operates for the benefit of industrial uses is to connect these two routes, providing a single loop. This will simplify access and improve safety through the reduction of turning manoeuvres.
- 6.2.14 The delivery of a single connected loop road which works for both estates will provide access to all of the blocks, while reduced need for turning or reversing. If delivered incrementally, either parcel - Lockwood Way or Delta Group - could deliver their part of the connection for the other part link into at a later date. This link could also be delivered at ground with development bridging above, to maximise the site's capacity.
- 6.2.15 At the western edge of the site any development should deliver the continuous waterside route, ideally set in an element of green space and overlooked by active frontages rather than the backs of buildings. This route will connect with the Wetlands access to the north and can also be accessed through the site itself. The connection through the existing Delta Group site also provides an important visual

connection with the open space which should be maintained as a gap in the waterside buildings.

- 6.2.16 Whilst the school is not expected to change within the lifetime of this framework, the opportunity to deliver a future connection to the south through the school's land should be safeguarded. The continuation of the route along the waterside should ideally be delivered through collaboration with the school.

- ➔ Industrial servicing/primary street
- ➔ Secondary street
- ➔ Pedestrian and cycling route



Industrial intensification through stacked industrial buildings.

Eden Girls' School is assumed to remain unchanged. A sensitive design response needed on neighbouring parcels

Land use and agent of change principle

6.2.17 The main aim of the northern sub-area is to intensify the industrial use, increasing the amount of floorspace from the existing 15,240sqm. Given the existing predominantly single-storey industrial use at the moment, it is anticipated that at least some element of the site will need to be developed as stacked industrial to achieve this intensification.

6.2.18 This type of development would not trigger any Agent of Change issues because no new uses are introduced. Despite this, there are sensitivities which should be acknowledged and designed for.

6.2.19 Normal development issues such as scale, massing, daylight and overlooking would apply to any development, but development of new industrial space has the potential to manage impacts through design. This particularly applies to the movement of vehicles and noise from outdoor activities.

6.2.20 Eden Girls' School to the south of the sub-area should be responded to sensitively by neighbours. Development adjacent to the school should be careful to minimise overlooking and noise. For example, the block proposed in the south of Delta Group should face only to the north, providing a screen between

the school yard and any vehicular movement and industrial activity to the north.

6.2.21 Similarly, frontage onto Blackhorse Lane and on the east-west entrance to the Wetlands should be set back allowing for green infrastructure while also providing active frontage. This would help improve safety with passive surveillance.

6.2.22 See section 5.3 for further information regarding industrial intensification and site capacity.

- ➔ Industrial servicing/primary street
- ➔ Secondary street
- ➔ Pedestrian and cycling route



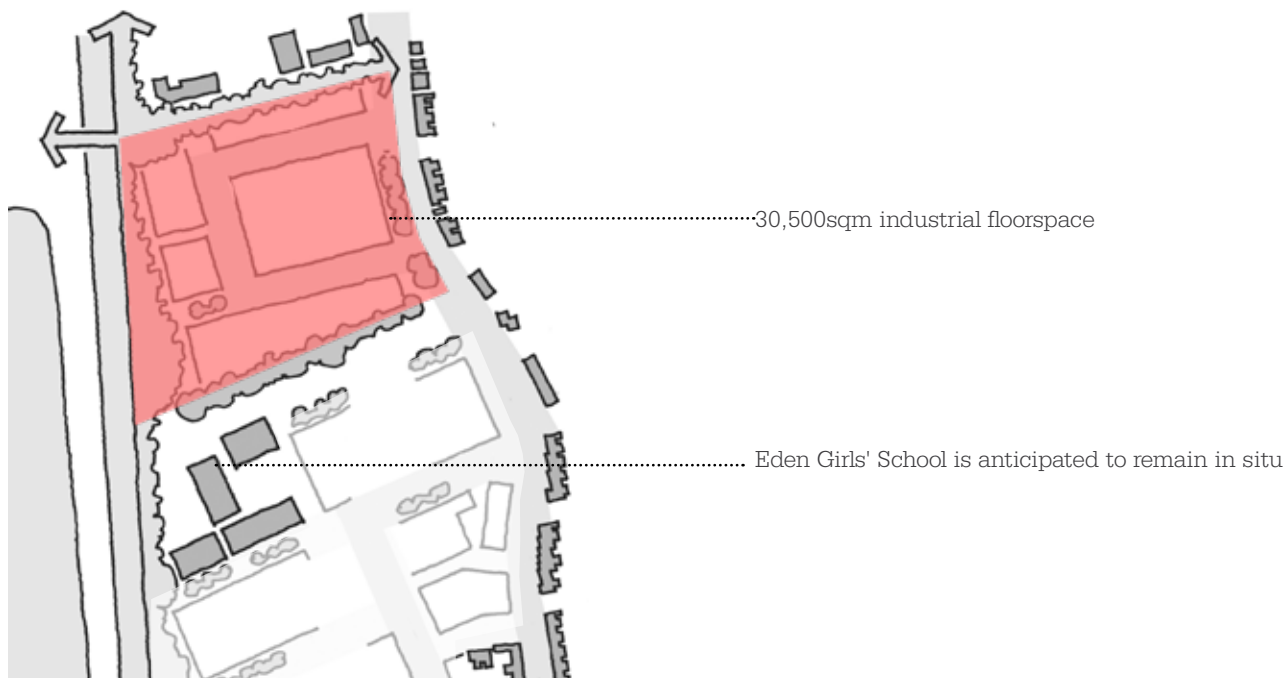
Public and green space

- 6.2.23 The strategic opportunities for green infrastructure in the northern sub-area primarily relate to the site perimeter. On the western side, it would be beneficial to keep building form away from the waterside and to include an element of open space as the setting for the north-south waterside walking/cycling route.
- 6.2.24 The lane to the north of the site provides the main access into the wetlands. The character of the lane at the moment is leafy and enclosed, which has its attractions. This may be balanced against the possibility of creating elements of overlooking to improve safety.
- 6.2.25 On the eastern side of the site there are a number of significant street trees. This line can be retained and reinforced through further planting to improve the character of Blackhorse Lane. Again, an element of active frontage at this point is important to improve safety.

Eden Girls School

- 6.2.26 There is a notable opportunity to enhance the presence of the Eden Girls School and the quality of the arrival which staff and pupils enjoy. The existing form of the entrance is largely unchanged from its former role as workspace, and would benefit from improved landscaping and approach now that a substantial proportion of daily trips are by people on foot and cycle.
- 6.2.27 The development to the south of the entrance on the BlackRock site is expected to establish new active frontage and enhanced public realm which will improve the approach from the south. The level changes on the Delta Group site are likely to mean that a landscape-led open character are more likely, and this may help to form part of a wider coordinated approach.

- Key public or green space
- Key industrial yard space



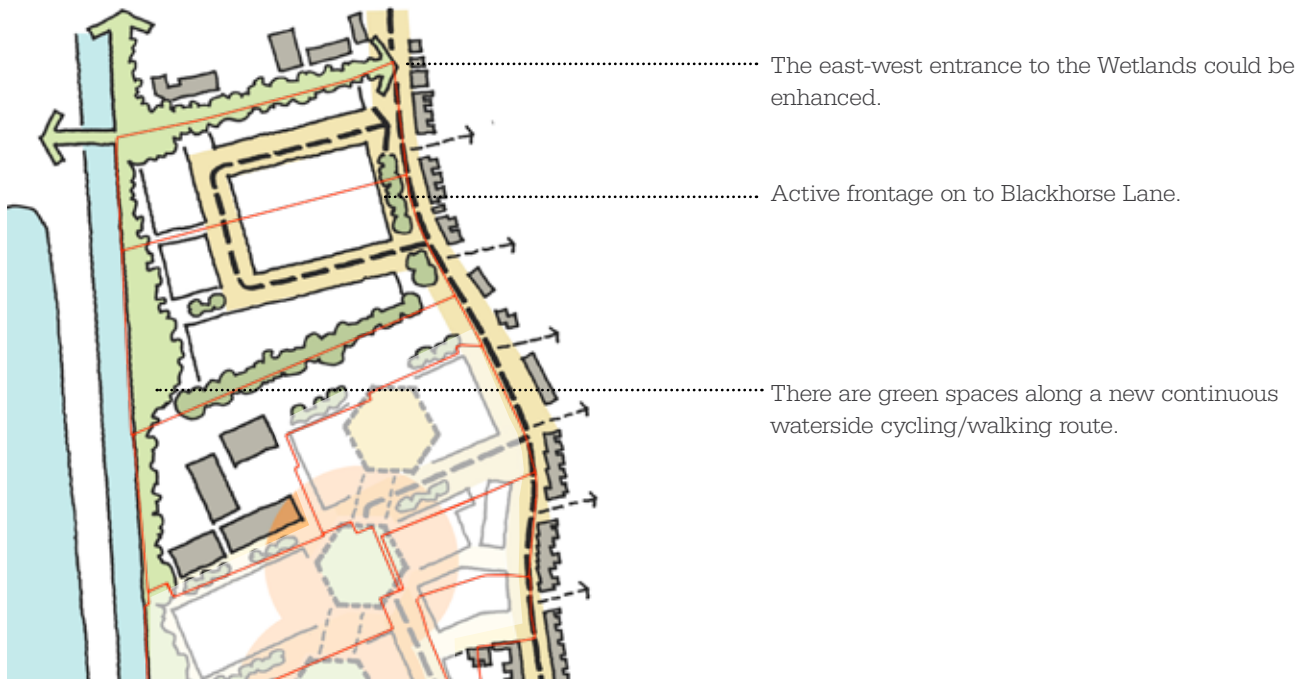
Estimated development capacity

6.2.28 The existing Lockwood and Delta Group sites have a Floor Area Ratio of just 0.51 - a relatively low ratio compared to the significantly higher densities being achieved on comparable sites in the industrial locations and presenting an opportunity for a significant potential increase.

6.2.29 Calculations for the capacity of the site are based on two different factors. In the case of the Lockwood and DeltaGroup sites the calculations are based on a doubling of the existing capacity. This is regarded as a reasonable and practical increase which can properly address the agent of change impacts on adjoining neighbours. In the case of the northern part of BlackRock's site ownership where detailed design testing has already been undertaken a higher factor can be applied and justified through detailed design.

6.2.30 In considering the intensification of the sites, the design of the buildings to provide suitable stacked industrial accommodation and the importance of yard space which provides servicing and access should be taken into account as detailed in section 5.3 for further information.

6.2.31 The Lockwood and Delta sites together are expected to deliver 30,500sqm of industrial space as part of the overall 48,000 sqm industrial space delivered within the retained SIL.



Key urban principles

- 6.2.32 **Two of the three lines:** A strong frontage on Blackhorse Lane and a continuous waterside route
- 6.2.33 **East-west routes:** Three entry points into the SIL two focused on HGV movements and one focused on people walking and cycling.
- 6.2.34 **Industrial strategy:** An area focused on intensification of industry.
- 6.2.35 **Other uses:** Retaining the school and working together to find mutually beneficial improvements to its setting and context.
- 6.2.36 **Height and massing:** Buildings are low to mid rise to accommodate industrial uses. Buildings might step down in height towards Blackhorse Lane, the Wetlands and neighbours.

- Key public or green space
- Key industrial yard space
- Areas where Tall or Taller buildings may be acceptable



Figure 53 Aerial image of the central sub-area, Google Maps 2021

6.3 Central sub area strategy

6.3.1 The central sub area is formed by several land ownerships, characterised by Blackrock's large ownership through the centre and north of the area and a series of smaller, but still significant ownerships around the edges. The sub area has been defined by the school boundary to the north and Priestley Way to the south.

Key issues and opportunities

6.3.2 The existing area is defined by the very large single building in the centre of the parcel. This has been subdivided and is now occupied by multiple businesses, and is split in two ownerships. The form of the building and the way in which it constrains the site are not suited to modern requirements.

6.3.3 As with the Delta Group site to the north, elements of land levelling have taken place in parts of the site to deliver a large flat area. As a result, the existing terrace of homes on the eastern flank of the sub area are set higher than the site, and there is a notable embankment from their gardens down to the industrial road level.

6.3.4 The presence of the Thames Spine Tunnel running diagonally through the centre of the sub area is one of the key constraints which will drive the development of the framework for the area.

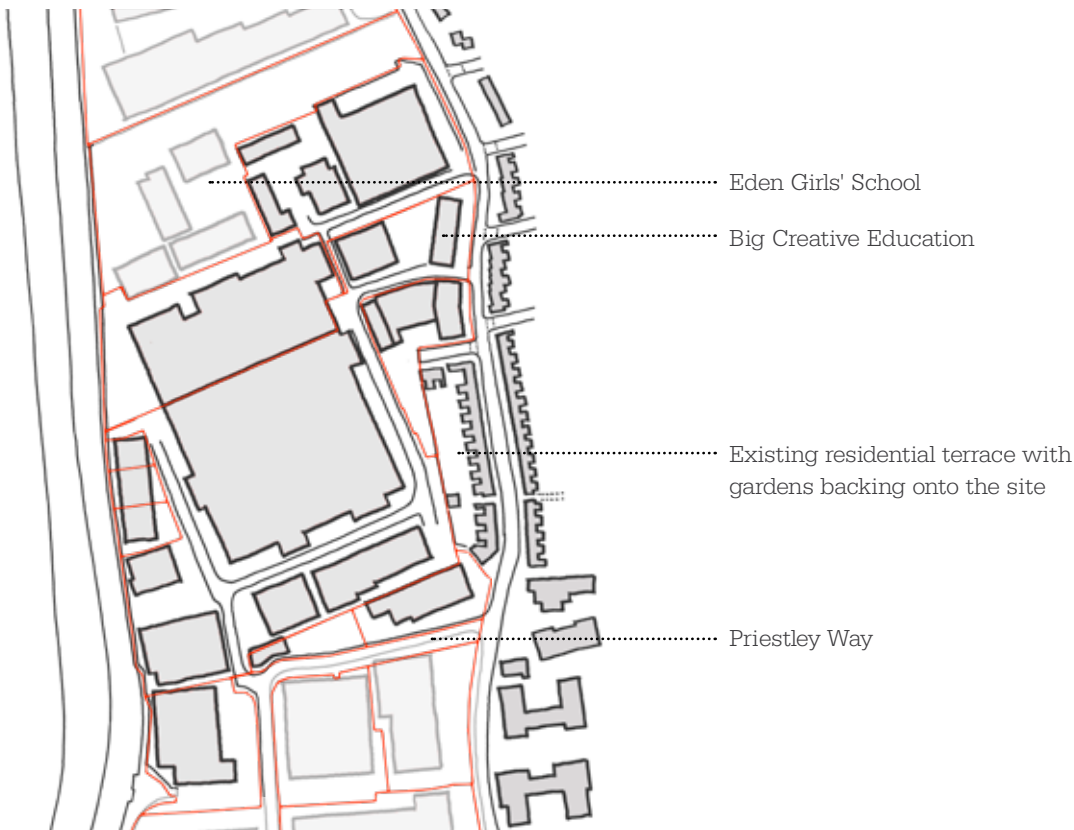
6.3.5 This sub area has a long boundary to the waterside, but at present the buildings and spaces turn their backs on the waterside. Any scheme for redevelopment should include provision for a public route along the western edge, potentially combining with green amenity spaces.

6.3.6 Eden Girls' School is located to the north of the sub area and forms a key constraint in terms of bulk, massing and overlooking. Whilst the school is not likely to be relocated and enable redevelopment of their site in the foreseeable future, an urban layout which retains the possibility of establishing a continuous north-south route connecting through to the central sub area would be welcome.

6.3.7 There is a terrace of two-storey Victorian homes on Blackhorse Lane which back on to the SIL on the eastern boundary. Their back gardens abut the site with the gardens being approximately 2m above ground. These homes are also a key constraint in terms of massing and overlooking, though the level change does offer some opportunity.

6.3.8 Uplands House is an attractive two-storey inter-war brick building which is one of the few within the SIL that has particular merit. Whilst it is not protected, options could be explored to retain the building to benefit from its continued character.

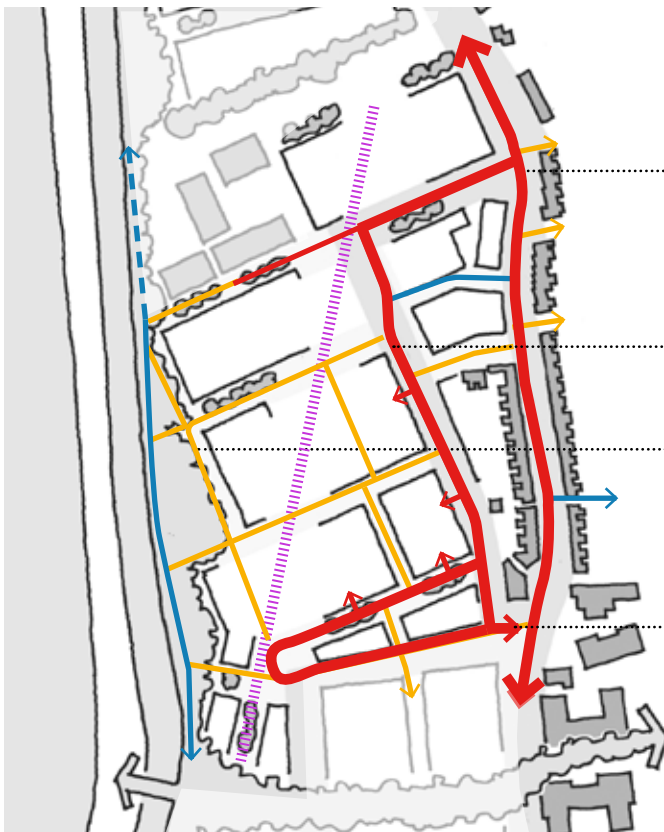
6.3.9 Whilst vehicle access into the north of the sub area is good, access into the south is more constrained, relying on a connection from Priestley Way. The coordinated development of sites in the southern part of the area will be particularly important to introduce new north-south connections to address this.



Existing sub area

- 6.3.10 The central sub-area is dominated by a single large building. Whilst this is sub-divided and occupied by several businesses, its urban impact on the form and character of the area is significant.
- 6.3.11 The existing industrial floorspace is 39,133sqm. Any re-development of this wider sub-area should ensure that overall industrial provision in this sub-area remains above 39,000sqm. This has been calculated using OS mapping to determine the Gross External Area (GEA) and multiplying that by the number of floors for every building within an industrial use class (E(g) (iii), B2 and B8). Mezzanine's have not been included. Outdoor space which is primarily used for industrial work is included (subtracting circulation, parking and any redundant space). Space not in industrial use, such as Big Creative Education, has been excluded. The method for calculating industrial floorspace is consistent across the borough.
- 6.3.12 This section demonstrates how the area could be redeveloped in full (retaining only Uplands House), but the block structure and movement strategy have been designed to accommodate partial delivery or the retention of some buildings.

Unit	GEA sqm		
Uplands 23B	98	Uplands 12C	772
Uplands 24	445	Uplands 18	504
Uplands 25	444	Uplands 19	502
Uplands 23A	312	Uplands 20	376
Uplands 10	270	Uplands 15	363
Uplands 04	1409	Uplands 14	1020
Uplands 07A	191	Uplands 08	644
Uplands 04C	158	Uplands 09	1219
Uplands 16A	533	4a Forest Trading	476
Uplands 17	536	4B Forest Trading	472
Uplands 05A	717	4c/d Forest Trading	953
Uplands 05B	907	4e Forest Trading	486
Uplands 41	197	Uplands 13	904
Uplands 50	905	Uplands 15A	394
Uplands 61B	355	Uplands 12B	342
Warren Evans	7027	Uplands 11B	333
Uplands 28	912	Uplands 11A	459
Uplands 26	443	2a Forest Trading	299
Uplands 29	430	2a Forest outdoor	936
Uplands 27	261	Uplands 06B/07	2971
Uplands 02	915	Uplands 16	829
Uplands 03	974	Uplands 4A	1258
Uplands 03 outdoor	1933	Uplands 17A	645
Uplands 12A	880	Uplands 06A	724
			39,133



Four entry points from Blackhorse Lane would improve access and allow some separation between routes for pedestrians/cyclists and routes for larger vehicles.

A loop access road for industrial servicing reduces the need for reversing and turning.

A more permeable network of streets gives more direct and legible access to all users. Streets and spaces to the south and west can have a different character, with few large vehicle movements.

A new connection through the Dignity Funerals completes a direct loop for industrial servicing.





Movement strategy

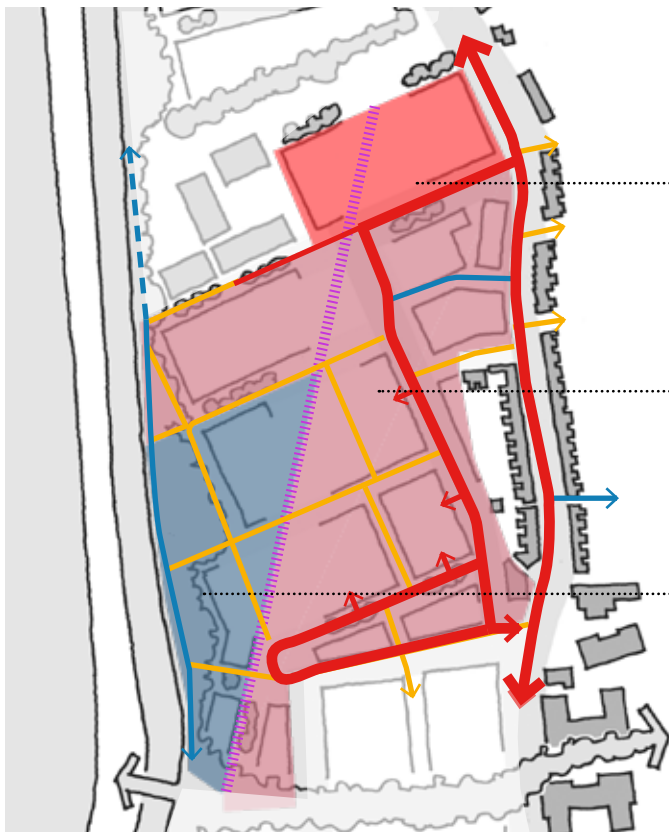
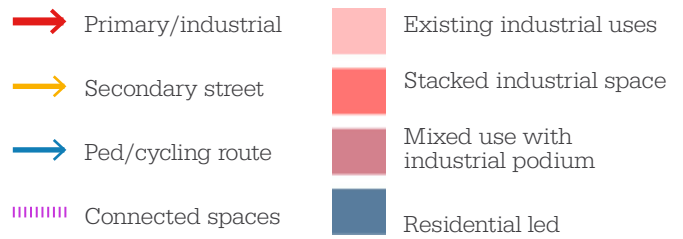
6.3.13 The aim of the industrial strategy is to focus industrial space towards the eastern side of the area where it can be serviced by a key spine route. This would enter at the north using the existing access and exit in the south via Priestley Way. A new connection through the Dignity Funerals site would significantly reduce the impact of larger vehicles on the area.

6.3.14 A separate service route which provides access to the western half of the site would not be intended for use by industrial traffic, but provides access for servicing, refuse collection and private vehicles. The development of the central area has the potential to radically transform the permeability and legibility of the area, delivering a much more extensive network of connections and overcoming the barriers presented by the very large existing buildings.

6.3.15 Comprehensive development will establish a network of connections south, towards the tube and rail stations and integrating with the housing zone developments. Connections to the north are likely to remain limited with the anticipated long-term presence of the school. However, the aspiration should remain to deliver a waterside route through

negotiation, and to safeguard future connecting routes in the event that the school site is ever redeveloped.

-  Industrial servicing/primary street
-  Secondary street
-  Pedestrian and cycling route
-  Connected spaces



Stacked industrial space delivered as an early phase to maintain industrial capacity and continuity, with good access to the road network

Podium industrial uses with residential above mediate between industry in the east and residential in the west by having industrial frontage facing onto the industrial route and residential frontage facing the opposite way.

Potential for non-industrial uses towards the west of the site against the waterside

Land use and agent of change

6.3.16 The key strategic principle for industrial uses in the central sub area is to create stacked industrial space to the north as part of the retained SIL in a location which benefits from good road access. Further industrial spaces co-located with new uses will be delivered in part of the sub-area re designated as LSIS. The industrial floorspace should be focused along the spine route on the eastern side of the sub-area and the new uses should be focused on the western side against the waterfront.

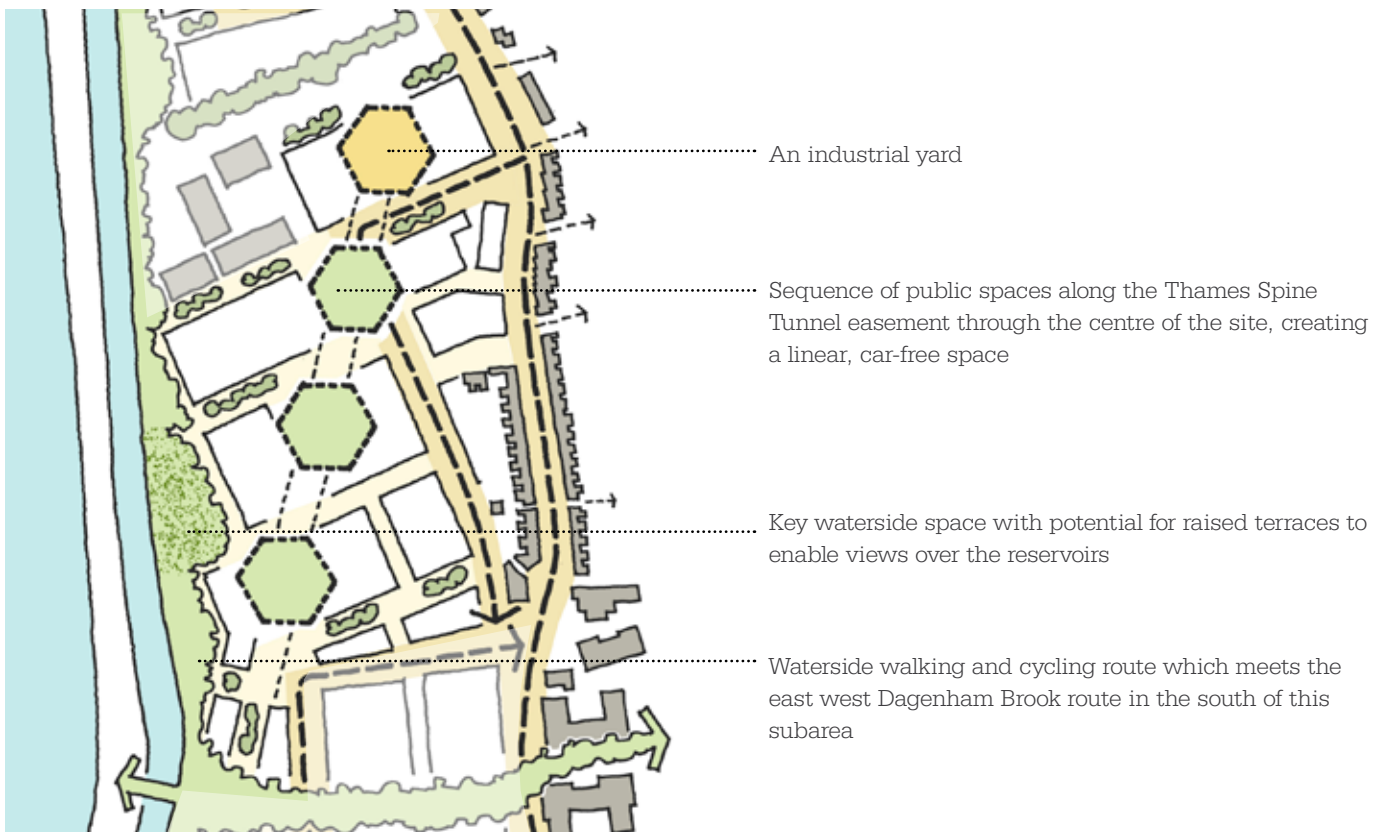
6.3.17 The row of houses on Blackhorse Lane which back onto the site have elevated gardens and rooms overlooking the existing estate. The presence of industrial traffic to the rear of their property is essentially unchanged. However, the introduction of a low-rise range of workshops against their rear boundary could create an effective screen which would help to reduce noise from vehicles and yard space to improve their condition.

6.3.18 The co-location of a new use (in this case homes) requires mitigation to ensure existing uses (industry) can continue to operate, mitigating for the impact of issues such as noise, vibration, air quality, etc. (See section 4.2 for more on Agent of Change mitigation.)

6.3.19 In the central sub area, the arrangement of the site has been carefully considered to minimise Agent of Changes issues. The arrangement of having podium blocks with industry at ground and residential above allows for a transition between industrial and residential uses. These blocks would be arranged with the ground floor entrance to industry facing onto industrial streets, with the entrance to homes above being at the opposite side of the block. This separation should help minimise conflicts.

6.3.20 Podiums blocks would need to be designed carefully with acoustic separation and to minimise overlooking of industrial yards. In terms of noise, amenity space on top of podium, would require screening from the street (through a low building or barrier). The industrial access route in the east focused industrial movements, yards and loading bays away from residential. The through route also minimises vehicles reversing and turning.

6.3.21 As this area is in several ownerships and developments may proceed at very different paces, designers will need to demonstrate how agent of change issues are dealt with in their buildings both in respect of protecting the existing industrial neighbours and also how new industrial users are protected from agent of change issues arising from new co-located uses.



Public and green space

6.3.22 There are several distinctive elements to the green space strategy for the central sub-area. Firstly, the area has a long frontage to the waterside, overlooking the River Lea Channel. As the strong block geometry of the site meets the waterside, it suggests the potential for green spaces, linked with a continuous waterside route. Stakeholder input also suggests that there would be potential for elevated public terraces which can allow for wider views over the reservoirs.

6.3.23 The Thames Spine Tunnel creates the requirement for open space cutting through the site. This is away from the key service routes and so allows for the possibility of quieter, greener spaces. Resolving the alignment of this route with the geometry of the wider street grid also gives the potential to create a series of public spaces and green spaces which can act as focal points for activity. Whilst the easement for the tunnel precludes deep foundations, lighter structures are likely to be possible. This would provide the opportunity to achieve elements of more defined enclosure for these spaces.

- Key public or green space
- Key industrial yard space



Estimated development quantum

6.3.24 An estimate of the development capacity has been calculated to understand the potential of each sub-area. This has been done as a range.

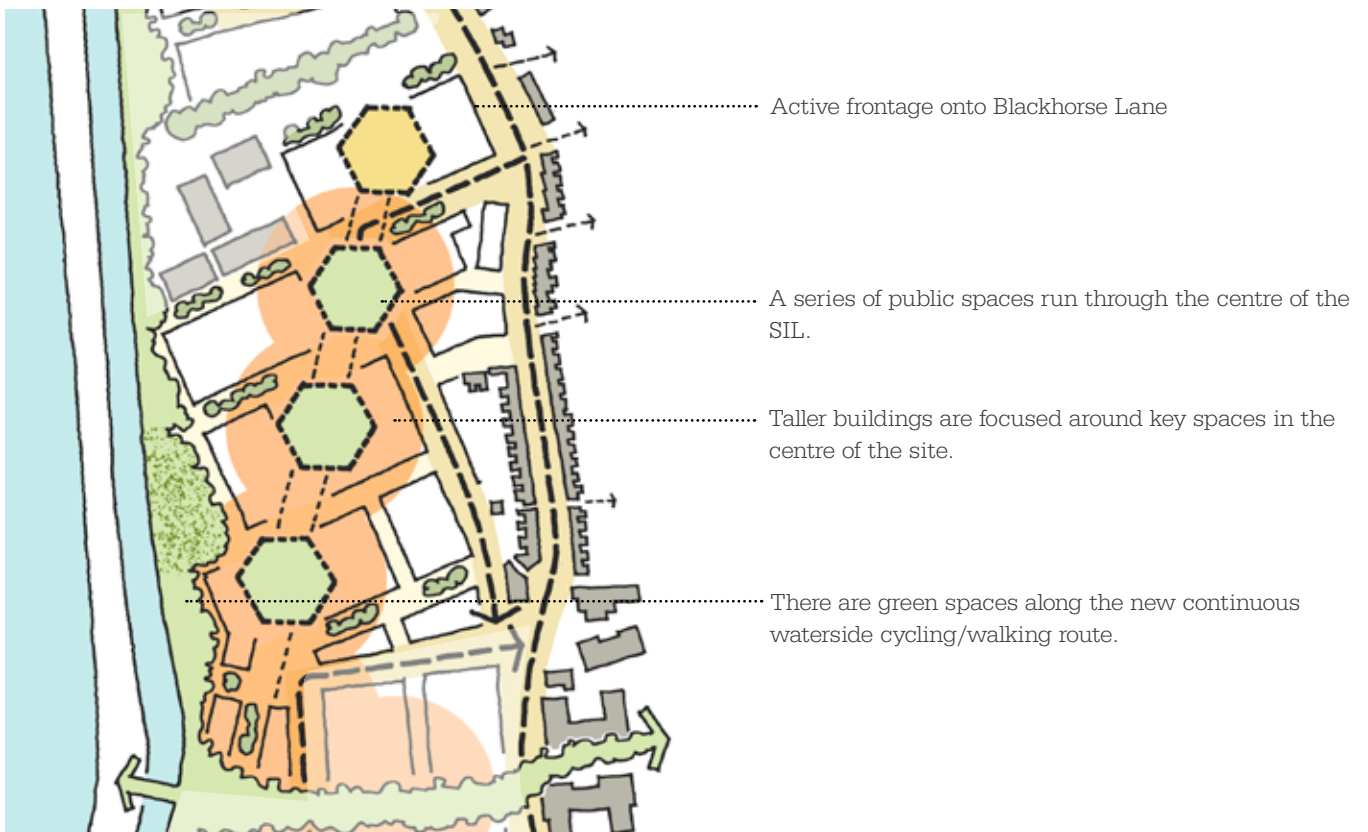
6.3.25 The central sub-area is proposed for intensified industrial use in the north, with retention of businesses and co-location of other uses in the south as part of the new LSIS designation.

6.3.26 Industrial capacity of the area is expected to at least match the existing 39,133sqm across both SIL and LSIS land.

6.3.27 The residential capacity has been calculated by applying the density range of 250 to 400 dwellings per hectare (dph) to the podium areas, and the densities of 300 to 500 dph for the residential-only areas. This has demonstrated a residential capacity of 1,500-2,500 new homes.

6.3.28 Capacity should be tested and revised by landowners through the development of the central sub-area strategy. Development proposals must provide a minimum of 39,000sqm.

- Developable area - Stacked industrial
- Developable area - Mixed use
- Developable area - Residential led



Key urban principles:

- 6.3.29 **The three lines:** a strong frontage on Blackhorse Lane, a series of public spaces through the centre of the site and a continuous waterside route
- 6.3.30 **East-west routes:** Four entry points into the SIL, two focused on HGV movements and focused on people walking and cycling.
- 6.3.31 **Industrial strategy:** Stacked industrial space delivered in the northern part, with a wider range of industrial uses then delivered in the eastern part of the sub-area along the road designated for industrial servicing.
- 6.3.32 **Introducing other uses:** Residential introduced in the south and west, with a co-location of uses in the middle to create a seamless mixed use neighbourhood.
- 6.3.33 **Height and massing:** Taller and Tall buildings may be appropriate in the centre of the sub-area, stepping down towards the Wetlands, Blackhorse Lane, and to sensitive neighbours (the school and terraced housing on Blackhorse Lane), subject to London Plan Policy D9 (Tall Buildings) and emerging LP1 Policy 8 (Character-led Intensification) and emerging LP1 Policy 57 Taller and Tall Buildings).

- Key public or green space
- Key industrial yard space
- Areas where Tall or Taller buildings may be acceptable



Figure 54 Aerial image of the southern sub-area, Google Maps 2021

6.4 Southern sub area strategy

6.4.1 The southern sub area is located to the south of Priestley Way, and forms the area which will connect and integrate with the housing zone to the south. As with other parts of the SIL, it is currently fragmented in ownership. However, it does have a good existing street pattern which can be integrated to provide a cohesive place.

Key issues and opportunities

6.4.2 The area has two access points from Blackhorse Lane, Priestley Way and Hookers Road. However, distinct ownerships means that these are not connected. Opening up the connection has the potential to significantly improve access and safety, as well as clarifying north-south links.

6.4.3 The Dagenham Brook passes east-west through the centre of the site in a culvert, requiring an easement through the centre of the area and placing a constraint on foundations. The brook is being de-culverted to the east of Blackhorse Lane as part of a new development project and similar measures may be possible here. Alternatively, the easement may also provide an opportunity for linear green space which will have the benefit of continuing the link and connecting the Sutherland Road area with the waterside.

6.4.4 The new housing zone development to the south provides street connections which will link the area towards the tube station. The northern elevations and especially the ground floor of the blocks on the boundary have been designed in the expectation of continued industrial use on the other side of the road. However, due consideration will need to be given to potential agent of changes issues for any new industrial space developed along the southern edge of the area so as to protect the continued presence of any businesses.

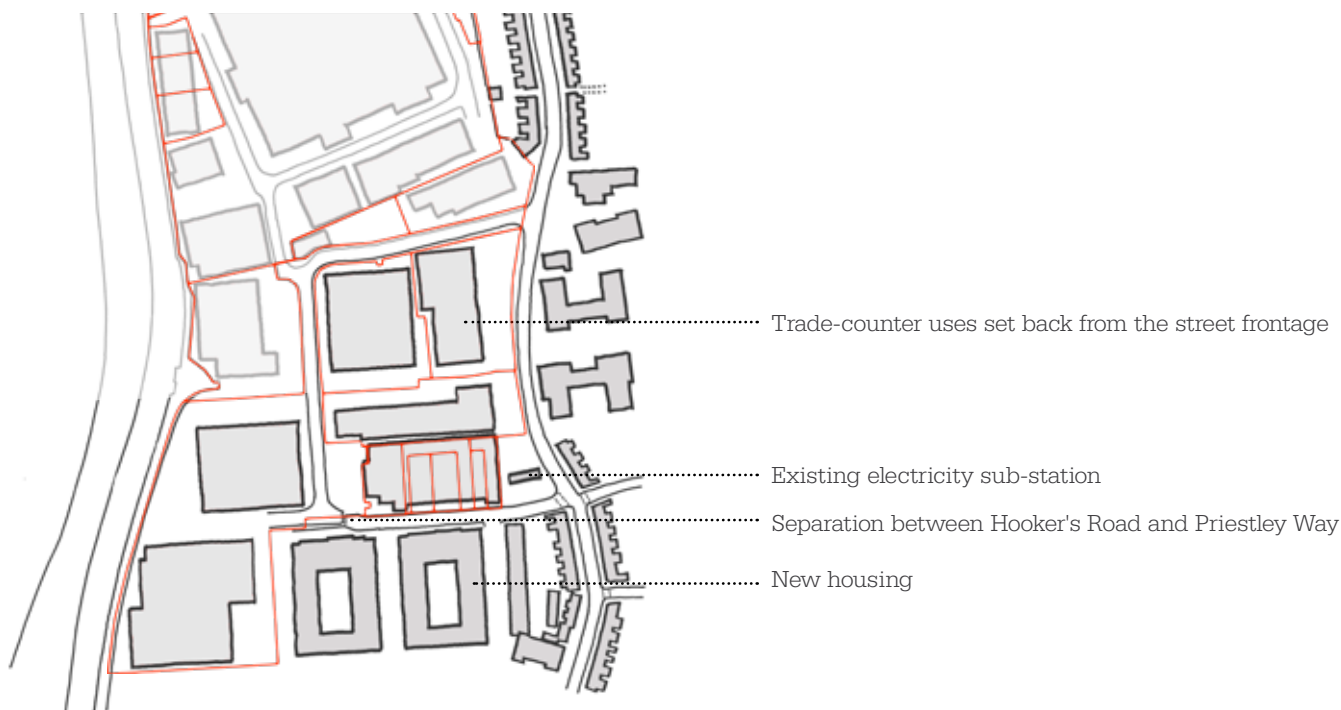
6.4.5 The central blocks of the area provide examples of the kind of customer-facing activities which any plans should accommodate, including Truman's brewery and tap room, the German deli, and Yonder, the co-working and climbing centre.

6.4.6 The Thames Spine Tunnel passes through the two western blocks, creating relatively small development footprints which may limit the potential to re-provide industrial space.

6.4.7 The existing frontage to Blackhorse Lane is set back from the road and includes mainly trade-counter uses with vehicle forecourts. A stronger frontage with greater intensity of usage would improve the feel for the street. However, the opportunity might be taken to retain a slightly wider public realm which can include significant street trees and retain the segregated cycling infrastructure.

6.4.8 At the south eastern corner of the area there is a significant electrical substation. This has the unavoidable impact of creating some blank frontages to the main road, albeit ones which have the appearance of buildings rather than boundary walls. A further important consideration will be the suitability of uses placed immediately to the west, and the limitations this may have for any residential uses above industrial space.

6.4.9 Given this area already has good coverage of the site and makes efficient use of space, intensification could alternatively be achieved by adding additional storeys to existing buildings.



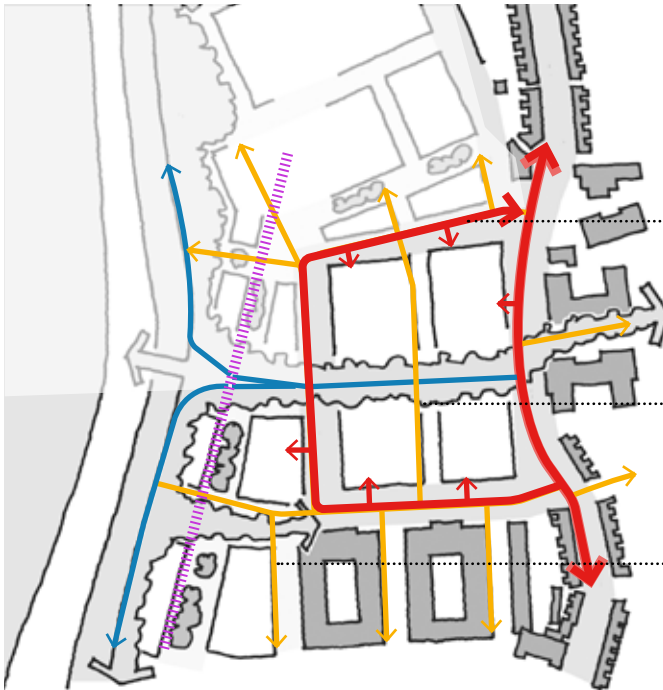
Existing sub area

6.4.10 The southern sub-area is in a number of distinct ownerships, and includes a range of uses, some of which are relatively new to the area such as Yonder and Trumans Brewery. The predominant character from Blackhorse Road is the blank walls of the sub-station enclosure and the trade counter uses set well back from the road.

6.4.11 The existing industrial floorspace is 22,264sqm. Any re-development of this wider sub-area should ensure that overall industrial provisions remains above the existing provision. This has been calculated using OS mapping to determine to Gross External Area (GEA) and multiplying that by the number of floors for every building within an industrial use class (E(g) (iii), B2 and B8). Mezzanine's have not been included. Outdoor space which is primarily used for industrial work is included (subtracting circulation, parking and any redundant space). Space not in industrial use has been excluded. The method for calculating industrial floorspace is consistent across the borough.

6.4.12 This section demonstrates how the area could be redeveloped in full, but the block structure and movement strategy have been designed to accommodate partial delivery or the retention of some buildings.

Unit	GEA sqm industrial space
1 Forest Trading Estate	2754
101- 4 Black Horse Lane	661
101- 3 Black Horse Lane	666
101- 2 Black Horse Lane	530
101- 1 Black Horse Lane	538
17/17a Forest Trading Estate	653
7 Forest Trading Estate	255
6/8 Forest Trading Estate	3042
10 Forest Trading Estate	4592
12 Forest Trading Estate	2857
6/8 Forest Trading Estate	927
10 Forest Trading Estate	1191
5 Forest Trading Estate	279
15 Forest Trading Estate	254
4-5 Hookers Road	561
1 Hookers Road	979
2-3 Hookers Road	488
7 Hookers Road	459
6/6a Hookers Road	597
	22,264



Priestley Way and Hooker's Road can be brought together to form a simple access loop for vehicles. It may be effective for access to be one way, with the exit to the north where visibility is best

A more permeable network of streets, providing more direct and legible access.

The street network connects up with the streets to the south.

Movement strategy





6.4.13 Delivering a unified approach to Priestley Way and Hooker's Road would deliver a clear and legible access loop for industrial traffic, minimising the need for reversing to create a significantly safer street environment. It may be most effective for this to operate as a one-way loop for larger vehicles, most probably with the entrance in the south and the exit in the north, reflecting the better visibility at the Priestley Way junction as vehicles rejoin Blackhorse Lane. One way operation for vehicles could also allow for the introduction of a segregated two-way cycle lane on both the north-south and east-west stretches of Priestley Way, significantly improving safety and accessibility. It may be possible to deliver this improvement as a relatively early win.

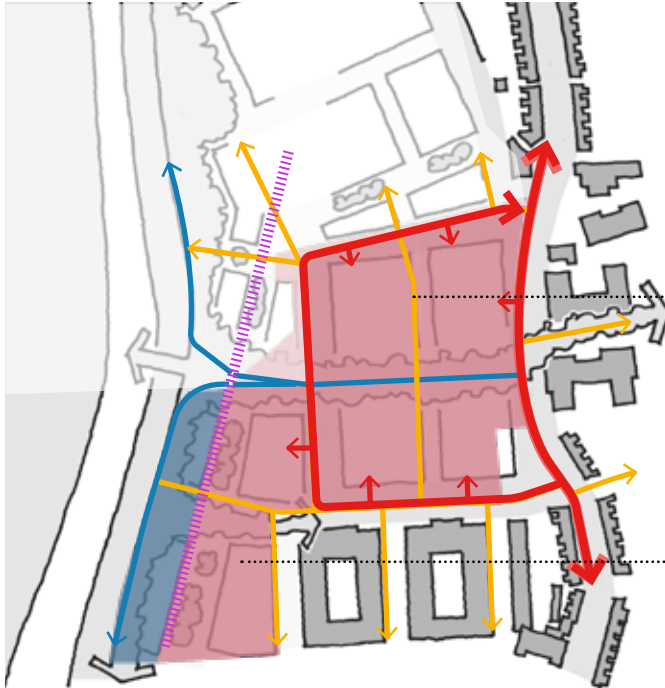
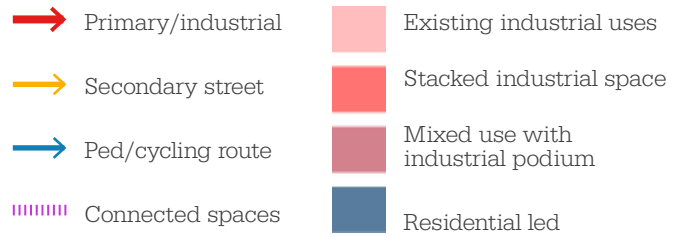
6.4.14 This loop gives effective access directly to most of the area with the exception of the southernmost block on the waterfront which is currently a document store. The future operation for this site can be continued with this access arrangement, but it does highlighted that any development of this block would be more suited to uses which require lower levels of HGV access.

6.4.15 The southern sub-area has an important role to play in making connections to the recently developed

residential area to the south and realising the north-south pedestrian permeability that has been built into the planning of that area. At a wider strategic level, the waterside route and the spine tunnel routes both offer good walking connections, but the more easterly options will be important to provide better links towards the tube station.

6.4.16 East-west connections linking to Blenheim Road and along the Dagenham Brook route through the new Blackhorse Yard development will provide better integration with the neighbouring residential areas, providing improved access to green space and the waterside.

-  Industrial servicing/primary street
-  Secondary street
-  Pedestrian and cycling route
-  Connected spaces



The deeper blocks in the northern part of the site could include a yard space to service industrial uses, freeing up street frontage for other uses

Access to service this block is limited, and the site may be best suited to uses which can be serviced with vans rather than HGVs

Land use and agent of change

6.4.17 The strategy for land use is for industrial use in the centre and east of the area co-located with other uses, with residential development in the west.

6.4.18 As the sub-area is divided into a number of distinct land ownerships which may be delivered at different times, it is expected that individual sites will need to re-provide industrial space. For smaller sites, this represents a phasing challenge in terms of continuity for businesses. However, the wider area development provides opportunities for decanting and subsequent re-provision of space.

6.4.19 The co-location of a new use (homes) requires mitigation to ensure existing uses (industry) can continue to operate, mitigating for the impact of issues such as noise, vibration, air quality, etc. (See section 4.2 for more on Agent of Change mitigation.)

6.4.20 The southern sub-area has already experienced Agent of Change issues with new residential uses being introduced to the south. As a consequence there have been issues with noise and vibration caused by vehicle movement and idling which new development could help to address. As a key principle, the delivery of a loop of road will make

a significant difference to the need for vehicle to reverse and turn within the street, reducing this impact whilst also improving industrial provision. A further measure which new development could explore is to create covered or enclosed loading bays.

6.4.21 The arrangement of the site has been carefully considered to minimise future Agent of Changes issues. Podium blocks with industry at ground and residential above allows for a transition between industrial and residential uses. These blocks would be arranged with the ground floor entrance to industry facing onto industrial streets, with the entrance to homes being at the opposite side of the block. This separation should help minimise conflicts. Podiums blocks would need to be designed carefully with acoustic separation and to minimise overlooking of industrial yards. In terms of noise, amenity space on top of podium, would require screening from the street.

- Key public or green space
- Key industrial yard space



Green space along the alignment of the Dagenham Brook, with the potential of a new bridge into the Wetlands

A linked chain of public spaces along the spine tunnel, connecting into the new development to the south

Public and green space

6.4.22 The specific aspect of green space within the southern sub-area is the Dagenham Brook Corridor, which passes east-west through the zone. As with the Thames Spine tunnel, it cannot be built over, and also requires an easement for maintenance access. Where the Dagenham Brook passes through the Blackhorse Yard scheme under development to the east of Blackhorse Lane it is being de-culverted, and this approach may also be suitable for the stretch that cross the southern sub-area.

6.4.23 As in the central area of the SIL, the Thames Spine Tunnel presents a requirement for a continuous open space.

6.4.24 Hooker's Road currently does not connect through to the waterside. However, as the framework for the area is developed, this should be delivered to provide connections to the waterside route and maintain good visual links. This also provides a further notable location for a small pocket of green space on the edge of the urban area.

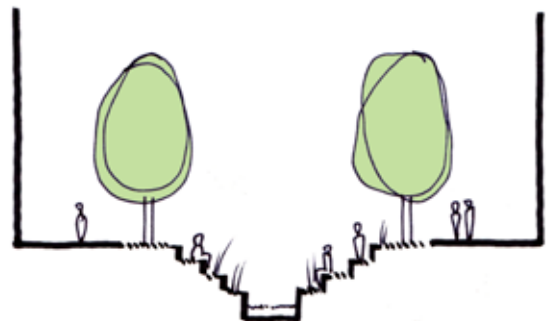
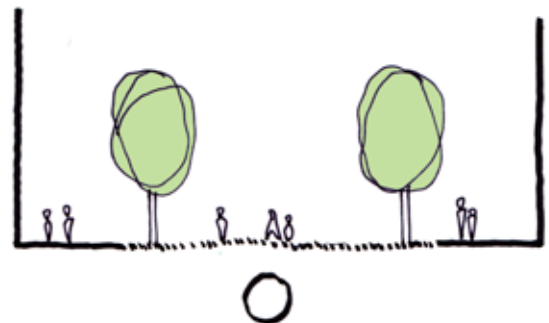


Figure 55 Sections through the Dagenham Brook Corridor showing how the area can either operate as a green space above the existing culvert, or accommodate a de-culverted approach. Given the need for gradual phased delivery the de-culverting may need to take place as a later stage of work once all surrounding sites have been delivered.



22,000sqm re-provision of industrial space

700-1,200 new homes.

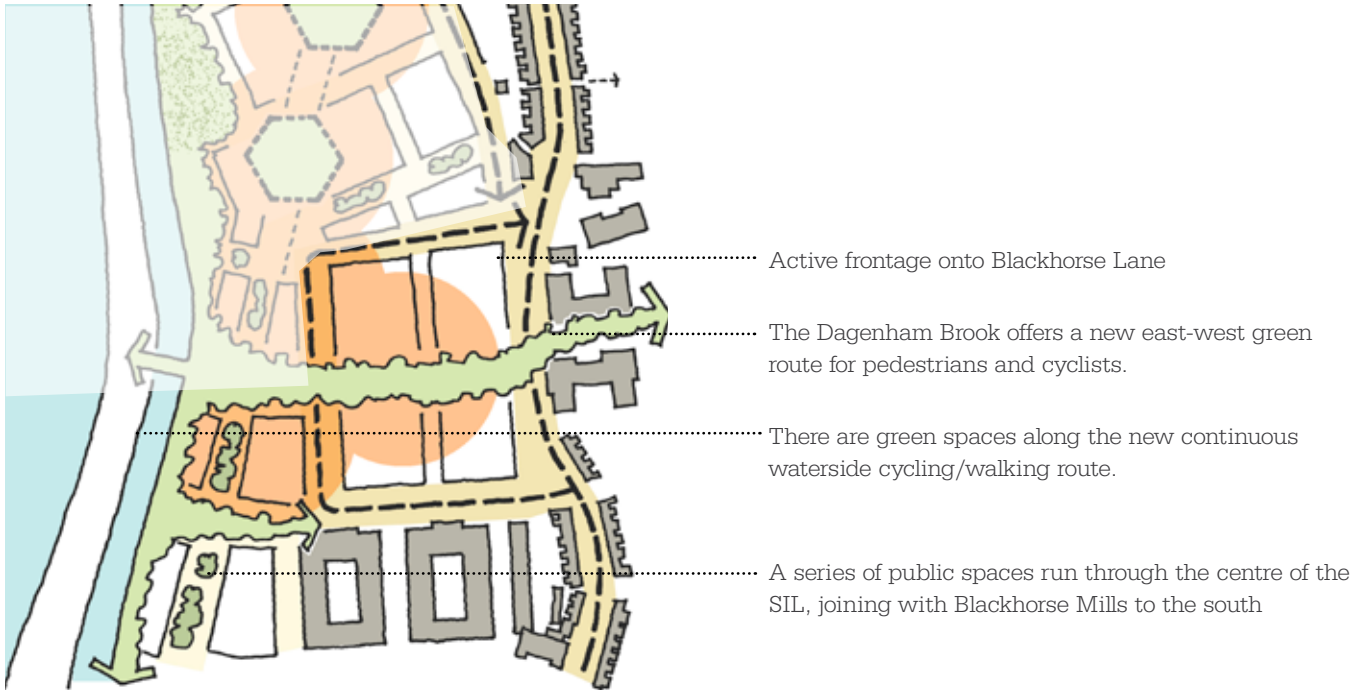
Development capacity estimate

- 6.4.25 An estimate of the development capacity has been calculated to understand the potential of each sub-area. This has been done as a range.
- 6.4.26 The southern sub area is for retention of industrial space co-located with new uses. A consolidation of industrial space in sites closer to Blackhorse Road and with direct access from the Hookers Road/ Priestley Way loop would allow for land on the waterfront to be developed solely for residential uses.
- 6.4.27 At the lower end, industrial capacity has been calculated as re-provision (22,265sqm) and at the upper end of the range, a plot area ratio of 65% (an appropriate measure of density on industrial land according to the London Plan Strategic evidence base document) has been applied to the developable site area (3.53ha). This approach indicates an uplift of approximately 1,000sqm to 23,000sqm.
- 6.4.28 The residential capacity has been calculated by applying the density range of 250 to 400 dwellings per hectare (dph) to the developable mixed use area, and the density of 300 to 500 dph for the residential-

led area. This has demonstrated a residential capacity of 700-1,200 new homes.

- 6.4.29 Capacity should be tested and revised by landowners through the development of the southern sub-area strategy. Any re-development of this wider sub-area should ensure that overall industrial provisions remains above 23,000sqm.

- Developable area - Stacked industrial
- Developable area - Mixed use
- Developable area - Residential led



Key urban principles

- 6.4.30 **The three lines:** an active frontage on Blackhorse Lane, a series of public spaces through the centre of the site and a continuous waterside route which continues to the south.
- 6.4.31 **East-west routes:** Three entry points into the SIL from Blackhorse Lane two focused on HGV movements and one green link (Dagenham Brook corridor) focused on people walking and cycling.
- 6.4.32 **Industrial strategy:** Industry focused to the east, facing on to the route designated for industrial servicing.
- 6.4.33 **Introducing other uses:** Residential introduced in the west, with a co-location of uses in the middle to create a seamless mixed use neighbourhood.
- 6.4.34 **Height and massing:** Taller and Tall buildings may be appropriate along the Dagenham Brook and Thames Spine Tunnel, subject to London Plan Policy D9 (Tall Buildings) and emerging LP1 Policy 8 (Character-led Intensification) and emerging LP1 Policy 57 (Taller and Tall Buildings). Building heights should step down towards the Wetlands, Blackhorse Lane, and to sensitive neighbours.

- Key public or green space
- Key industrial yard space
- Areas where Tall or Taller buildings may be acceptable

6 Implementation

7 Implementation

7.1 Phased delivery

7.1.1 The SIL is typified by complex and diverse ownership arrangements. The framework has been developed with recognition of landownership boundaries and seeks to overcome the associated delivery challenges, enabling each landowner - large or small - to unlock their site's full potential. Given these conditions, a gradual and phased development is anticipated for the SIL.

7.1.2 The new framework builds on the existing street network, making new connections when they are needed to overcome barriers and create an integrated approach. Retaining existing streets helps to support a phased development to minimise disruption. Similarly, edge conditions have been considered within the block structure, allowing each parcel to proceed at their own pace and with as little dependency on each other as possible. The framework has been set out so that each phase, as far as possible, functions as a completed place regardless of the progress made on developing adjoining parcels, while at the same time teeing up wider opportunities.

7.1.3 A number of key principles should guide phasing of future development:

- **Collaborative working:** Landowners and developers will need to work with LB Waltham Forest, the GLA, existing businesses and neighbouring landowners in the planning and delivery of their site. They will also need to consult with the wider community.
- **Industry-first, net positive phasing:** Within each site, development should be phased to deliver industry first. Early phases of development should result in an increase of industrial floorspace, considering the area demolished and the area constructed.

- **Single decant:** Phasing should be planned to minimise the need for existing businesses to relocate more than once and minimise disruption. To achieve this, areas with higher levels of vacancy would be more suitable as a first phase.
- **Maintaining access:** Throughout construction, access must be maintained to surrounding parcels, allowing businesses to continue to operate.
- **Intermediate states:** Whilst the overall framework will need to be planned to design-out agent of change issues, consideration should also be given to the conditions and arrangements when sites are partially delivered.
- **Interim road improvements:** Where parcels of land come forward for redevelopment but are reliant on access via private estate roads that are in a different ownership and not yet redeveloped, landowners and developers should seek to work with relevant neighbouring landowners and businesses and LB Waltham Forest to deliver interim improvements that would provide an enhanced environment for pedestrians, cyclists and other users. The same general considerations should apply if interim improvements are needed to the public highway.

7.2 KEEP, SEED, GROW

7.2.1 In 2016 Waltham Forest established the theme of 'Keep, Seed, Grow' to support all types of business at different stages of their development as part of an Economic Growth Strategy. As we look to the future this mantra still holds true for the Council as we re-imagine our economic plan to lead us out of the pandemic.

7.2.2 'Keep, Seed, Grow' is the lens through which we see the implementation of any part of the masterplan. It guides our approach to retaining and protecting existing businesses (Keep), incubating new businesses and enterprise (Seed), and supporting those who want to grow further physically inside the SIL or expand their services (Grow). All types of business contribute positively to the local economy and should be supported through phased delivery of the framework.

KEEP

7.2.3 The wide range of businesses on site is what makes Blackhorse Lane SIL unique and should be protected on site as much as possible. The Blackhorse Lane Landowner Charter makes landowners aware of Waltham Forests expectations from them, and businesses aware of Waltham Forests commitment to their future on site. Working collaboratively with landowners and existing businesses to secure their future on site is paramount for the Council.

SEED

7.2.4 Creative industries have been drawn to the Blackhorse Lane area over many years. This is due to affordable rates, business support and training available through organisations like Blackhorse Lane Workshop and the culture of makers and creatives that naturally support one another.

7.2.5 There is clear evidence of significant interest in Waltham Forest from businesses being squeezed out of inner London. This opportunity for the borough to facilitate new businesses in Blackhorse Lane is

strengthened by the accreditation of the CEZ. The CEZ formalises the existing positive environment to build a successful new creative business district with its specific policies and support systems. The Blackhorse Lane SIL should continue to be the perfect location to incubate the seeds of new business success into the future.

7.2.6 An element of new workspace provided in the area is expected to be maintained as affordable (at a discount on market rents) to ensure that businesses which are starting out are able to access space to help them develop. The Council is developing a workspace strategy with actions to support this, with details of how applicants will be expected to evidence and agree an acceptable form and level of affordable workspace outlined in the Developer Contributions SPD.

GROW

7.2.7 Existing SIL businesses may want to grow, but struggle to find the right type of space on site to grow into. This is something that is felt across the borough. The introduction of new homes and other uses into the area will also increase demand for businesses and services and therefore lead to further growth. The masterplan can help address these issues in Blackhorse Lane by providing a mix of spaces that are flexible to meet business needs as they change overtime.

7.2.8 Testing of a range of flexible typologies and workspace to be developed at the sub-area stage (part B) and through detailed planning application stages.



Responding to engagement:
The Charter has been tested and is supported by businesses, current occupiers and landowners through the engagement process.

7.3 Blackhorse Lane Charter

7.3.1 If development comes forward, these commitments will be required from landowners.

1. Increase industrial floorspace

7.3.2 Local evidence shows a need for 52,000sqm of new employment floor space in Waltham Forest over the next 15 years. The delivery of greater efficiencies and more industrial floorspace at sites like the Blackhorse Lane Strategic Industrial Location have an important role to play in achieving this target.

- Landowners should be ambitious about the amount of additional industrial floorspace they aim to deliver. The Council will expect a net increase unless robustly justified.
- As a minimum, landowners must re-provide the existing quantum of industrial floorspace on their site(s), as measured by the council
- All phased development should follow a net positive approach (ie. in the first phases of construction, provide more floorspace than is demolished)

2. Retain existing businesses

7.3.3 The existing mix of businesses at the Blackhorse Lane Strategic Industrial Location makes the area unique. Robust strategies will be needed to support them and allow them to flourish, in order to ensure that this unique quality and sense of place is not lost. This is a priority as part of the Council's Keep, Seed, Grow agenda.

- Landowners should engage with existing businesses to create buildings, yards and streets that meet their needs and are affordable
- Development should create spaces that are adaptable to future changes in business needs and market trends
- Disruption to businesses should be minimised, and the need for them to relocate more than once avoided.

3. Enable the delivery of the wider Strategic Industrial Location

7.2.9 The future of the Blackhorse Lane Strategic Industrial Location will be most successful if it is developed over time in accordance with the framework.

- All development proposals should follow the urban framework to create a coherent place, unlock strategic opportunities and safeguards important new routes and connections
- All development proposals should be coordinated with the wider context to protect existing uses and to safeguard future development opportunities.
- Each development proposal should be designed to feel complete in itself, regardless of the surrounding parcels

4. Explore the potential for other uses

7.2.10 The needs of industry should always be put first and safeguarded in Strategic Industrial Locations. The re-designation of the southern and central part of the SIL as LSIS allows for the introduction of a wider range of uses to be introduced such as community, retail and residential.

7.2.11 All design should put the needs of industry first and arrange the site to avoid potential conflicts with other uses

- Existing uses should be protected when introducing new uses onto the site
- New industrial spaces should be located and designed to protect their ongoing future from 'agent of change' issues. Non industrial spaces should also be designed with this principle in mind.

7.4 Infrastructure

- 7.4.1 Key to the creation of successful places is the delivery of supporting physical and social infrastructure.
- **Road Network:** The existing road network on the site is largely proposed to remain and be upgraded, with new connections between landownerships. The nature and character of the streets will need to change to respond to the need for pedestrian and cycle safety and comfort. This will be considered in more detail at the sub-area stage and will need to follow local and London policy.
 - **Energy network:** Given the potential quantum of industrial and residential development, the provision of a new SIL-wide energy centre or connection to an existing energy network will need serious consideration once the first phase comes forward. Feasibility testing must be presented to the council to explore the best approach before being agreed with GLA.
 - **Health:** A new health centre has been constructed at Sutherland Road. It is anticipated that this will open in early 2022. It should have the capacity to accommodate the potential increase in population on the SIL. This will continue to be reviewed.
 - **Open Space:** The Wetlands provides a fantastic resource for local people, however given its importance for nature conservation and use by Thames Water opening hours are restricted. As a result, it is important that the masterplan provides generous new open spaces to meet the needs of existing and future users.
 - **Play:** Space needs to be provided in line with the Waltham Forest emerging LP1.
 - **SUDs** based drainage solutions should be implemented within new developments to achieve greenfield runoff rates in accordance with the London Plan and Local planning policy. Consideration should be given to the implementation of strategic flood mitigation tied into provision of good quality amenity space and nature based solutions. De-culverting opportunities should be explored where possible to introduce river restoration/ordinary watercourse restoration corridors to link developments and enhance biodiversity, ecology, provide improved amenity space and offer health and wellbeing benefits to local communities.
 - Investment and access into the **Wetlands** is a priority for the council and should be considered.
 - **Enjoy Waltham Forest** - Continue to improve access to safe pedestrian and cycle routes along Blackhorse Lane and within the SIL. Deliver safer crossing points along Blackhorse Lane to enhance existing east-west routes. New crossings should be designed in line with Enjoy Waltham Forest guidance.
 - **Highspeed broadband** to help meet the needs of industry.
 - **Utilities** – early stages of development will need to identify what upgrades will be needed and how to be funded, given the scale of potential development.
 - Commit from developers and landowners to **green jobs** and training as part of the post COVID recovery – jobs for the future.
 - Support to reach the aim of the **Creative Enterprise Zone** deliverables including affordable workspace in line with the Council's expectations on rates for the area.

7.5 Retention and Relocation Strategy

7.5.1 In order to ensure development is managed in a comprehensive and proactive manner which reduces disruption to existing businesses, a bespoke 'Business Retention and Relocation Strategy' (BRRS) will need to be developed. This will need to be brought forward under a masterplan process or as part of a sub-area strategy and will be a validation requirement of any planning application for industrial intensification. In order for a masterplan or sub-area strategy to be supported it will need to follow the policy approach outlined in Policy 30 of LP1.

7.5.2 It is recommended that the BRRS is discussed as part of the pre-application process and updated throughout an application's journey to committee, including those proposed in outline.

Purpose

7.5.3 The BRRS will help to mitigate uncertainty for those businesses affected by development proposals, minimising the need for costly and unsettling relocation. The Council recognises that each business is unique and a bespoke approach will need to be adopted by landlords and applicants in their BRRS to evidence how they have tailored their approach on a case by case basis. When preparing their BRRS, applicants must adhere to the key aims set out below.

Affordable Workspace

- Affordable workspace is defined in the emerging LP1. The floor quantum and discount applied to proposed Affordable Workspace is to be proposed by the applicant in their planning application submission.
- The requirement to provide Affordable Workspace is separate from the requirement to develop a robust BRRS, although the utilisation of the former for the latter can be considered.

Commitment to the 'Blackhorse Lane Charter: Retain Existing Businesses'

- Landowners/developers must consider the needs of existing businesses as set out in the charter and shall

provide evidence of how they have sought to retain them, either on-site or re-home them in the newly developed accommodation, where possible.

- Applicant's will be required to evidence to the Council that they have considered the needs of affected businesses when negotiating leases in the pre-planning, planning and post-planning stages of development. The Council will expect to see evidence of how existing businesses have been offered support including where appropriate
 - commercial incentives, and/or
 - resources including but not limited to - information on how to access commercial agents, lists of available commercial property (publicly available or within the developer/ landowner's control) to stay on site in safe and suitable premises inside the SIL. If this is not possible and relocation outside the SIL is the only viable option for both parties then a robust evidence base and narrative for this course of action will need to be provided.
- The Council will not usually support any business relocation plans that involve more than one move inside or outside the SIL unless this is a specific requirement of the affected businesses or it is agreed by all parties.

Early Engagement with Businesses

- Early engagement is defined as a period before or in tandem with the early stages of strategic design. It is essential for businesses that will be impacted by any future change to be kept up to date with a scheme's timeline. Businesses need time to plan for their future and a level of certainty is required for them to do so effectively. This will ensure that the future intentions and needs of businesses can be understood and planned around, opportunities to align beneficial outcomes are maximised and abortive or inflated commercial penalties are minimised or avoided.

- A BRRS will detail how and when businesses have been consulted on proposals, including evidence of their meaningful involvement and opportunities to reasonably influence scheme timescales.

Open & Transparent Communication with Businesses

- Landowners/developers should be open and transparent about all aspects of timelines for redevelopment including planning process, phasing, potential relocation, and vacancy programme.
- The Council will expect to see evidence that any disruption to existing businesses in the pre-planning stage such as additional noise, vibrations, drilling, reduced access points etc. has been communicated to the affected parties as part of a regular programme of communication.
- Communication should be frequent through an assortment of mediums including digital and non-digital tools to ensure accessibility of information.
- Landowners/developers should adhere to regular contact with the businesses through drop-in session and remind all parties of key timelines and dates for vacancy.
- Landowners/developers will provide a clear, consistent and responsive single point of contact for businesses to raise queries and concerns.
- There should be clear and transparent communication of the expected increase in available rents, service charge and business rate levels, as soon as reasonably possible so that businesses can make informed decisions about the suitability of the spaces which are proposed to be provided.

A Collaborative Retention & Relocation Process

- The onus will be on the developers/landowners to work with businesses through the BRRS process.

- The Council will work closely with the landowners to agree a retention and relocation process and principals appropriate for their sub-area that will guide the BRRS forming part of any future planning applications for sites within the SIL.

- All tenants should have the opportunity to return to site in a later phase of the development should they wish to based on mutually acceptable commercially agreed terms and arrangements.

- The Council, where required, will provide reasonable assistance to businesses in identifying local available space within the borough should they wish to relocate outside the SIL. This will include providing information on the Council's availability within its corporate estate (if applicable) and providing contact information for known space opportunities from other landlords that the Council is aware of within the Borough.

- In additional, where retention is not possible within the Borough the Council will liaise with Productive Valley partners to help tenants stay inside the Upper Lea Valley.

The Cost of Retention & Relocation

- Landowners/developers should support businesses (access to recourse, financial support) with their relocation process particularly where businesses have made substantial investment in the 3-5 years prior to relocation.

- The Council appreciate that new space will come at a premium with the potential for increased service charges. Evidence for managing any commercial transitions for affected businesses will need to be supplied in the BRRS, showing how landlords have taken a wide range of appropriate flexible approaches to mitigate the impact of increased costs as a result of redevelopment. This will allow businesses to adjust financially overtime to new rates of rent and service charge so they are not priced out from the beginning of the process.



Responding to engagement:
Phasing and decant will be important to businesses. We learnt from engagement that there have been high levels of investment in the space. A single decant will be critical to minimise disruption to operations and moving costs.

7.6 Sub-area strategies

- 7.6.1 This framework document (Stage 2, Part A) provides a series of overarching Masterplan principles for industrial intensification, consolidation and co-location development across Blackhorse Lane SIL which is proposed to be adopted as an SPD. Following from this document, the Council will collaborate with landowners/developers to produce sub-area specific strategies (Stage 2, Part B) which develop a more detailed framework for their relevant sub-area and meet the remaining requirements (as identified below) of the GLA's two stage process for industrial intensification.
- 7.6.2 Sub-area strategies will need to align with the principles and minimum capacities set out in this Masterplan Framework document. The aim of the sub-area strategies is to progress the information and guidance presented in this Masterplan framework towards more detailed design solutions and principles, which will support the delivery of new development proposals within the sub-area (via site specific planning applications). The strategies will be expected to provide greater certainty/clarity for the Council, the landowners and also for local businesses and the wider community in understanding the framework approach in each sub-area as and when proposals come forward. The sub-area strategy should be produced and agreed with the Council in advance of any subsequent planning application for sites within the SIL and in that specific area.
- 7.6.3 The Council will encourage a collaborative approach between interested parties. The sub-area strategies will require further engagement with landowners and tenants/businesses, as well as engagement with the GLA. Landowner engagement should be over-seen by the Council to ensure all landowners are given the opportunity to shape the sub-area strategy.
- 7.6.4 Sub-area strategies should meet the outstanding requirements of the GLA's Stage 2 process by including the following:
- A framework plan and an indicative land use plan which demonstrates how agent of change issues are dealt with;
 - An approach to phasing, decant and business retention and relocation to demonstrate a net positive phasing strategy can be achieved to support single decant;
 - A coordinated approach to the movement and access to create a unified network of streets and spaces;
 - A coordinated approach to the delivery of green space and other amenities within the sub-area;
 - Consideration of how edge conditions between parcels are coordinated, both in the final developed condition, but also at interim states of delivery by one landowner only;
 - Capacity studies which demonstrate the quantity of industrial, residential and other non-industrial spaces/buildings which are proposed;
 - Identification of any opportunities or requirement for landowners to collaborate in order to deliver the industry-first principles and phase development to support existing businesses;
 - Supported by a viability and delivery Plan in line with the requirements of emerging LP1 Policy 30 and the GLA's Industrial Intensification Practice Note;
 - A coordinated approach to scale and massing; and
 - Principles for a coordinated energy strategy.
- 7.6.5 It is expected the sub-area frameworks will be supported with illustrative diagrams and plans to a level of detail commensurate with a site development brief but is not expected to be to the level of a planning application.

