Industrial & Logistics Sounding Board

Unlocking Industrial Co-location Development

Report of Co-location Working Group

December 2023

This report summarises the findings of the Co-location Working Group established by the Industrial and Logistics Sounding Board (ILSB).

The Greater London Authority (GLA), in partnership with BusinessLDN, established the ILSB in 2017 as an independent forum for industry professionals to engage with the GLA to formulate the draft London Plan policies in relation to industrial land uses.

The ILSB is an independent forum comprised of professionals from the public and private sector, including central, regional and local Government representatives, planning consultants, transport organisations, architects, developers, trade bodies and academics.

The Co-location Working Group was appointed by the ILSB, as a forum in which public and private sector industry professionals can bring their experience and knowledge to review and debate the challenges of delivering effective co-location projects.

The following individuals were members of the Co-location Working Group:

Jeremy Castle (Chair) (Deloitte)

Alix de Nercy (Deloitte)

Laura Elias (SEGRO)

Tessa English (JLL)

Angie Fenton (Quod)

Jessica Ferm (University College London)

Catriona Fraser (Turley)

Evangelia Georgali (Greater London Authority

Amy Gilham (Turley)

Celeste Giusti (Greater London Authority)

Edward Jones (London Borough of Enfield)

Ella Randel-Khan (SEGRO)

Antonia McLean (Transport for London)

John Oosthuizen (Transport for London)

Jorn Peters (Greater London Authority)

Ben Posford (CBRE)

Matthew Wong (London Borough of Tower Hamlets)

Executive Summary

This report has been produced following the discussions of the Co-location Working Group (CWG) set up by the Industrial & Logistics Sounding Board, which was established by the Greater London Authority in partnership with Business LDN. The CWG (chaired by Deloitte) was formed to discuss how developments involving the co-location of industrial with non-industrial uses can be effectively delivered in London.

This report considers the challenges faced by investors to deliver schemes which effectively co-locate industrial and other uses on a site. This is an approach endorsed in planning policy for appropriate locations, as the London Plan (2021) emphasises the need to ensure that industrial land is retained, intensified and optimised to fulfil the existing and future needs of the city's rising population. The London Plan identifies co-location as an emerging spatial solution to the tension between the need to provide sufficient space for essential industry and deliver on housing targets for the city.

This report provides commentary on the design of implemented and emerging co-location projects across London, highlighting key lessons for the real estate industry. The report then sets out the recommendations of the CWG, which focus on potential innovations to improve the industry's response to the practical challenges of co-location.

The CWG's recommendations include:

01 Increasing engagement in plan-making and masterplanning

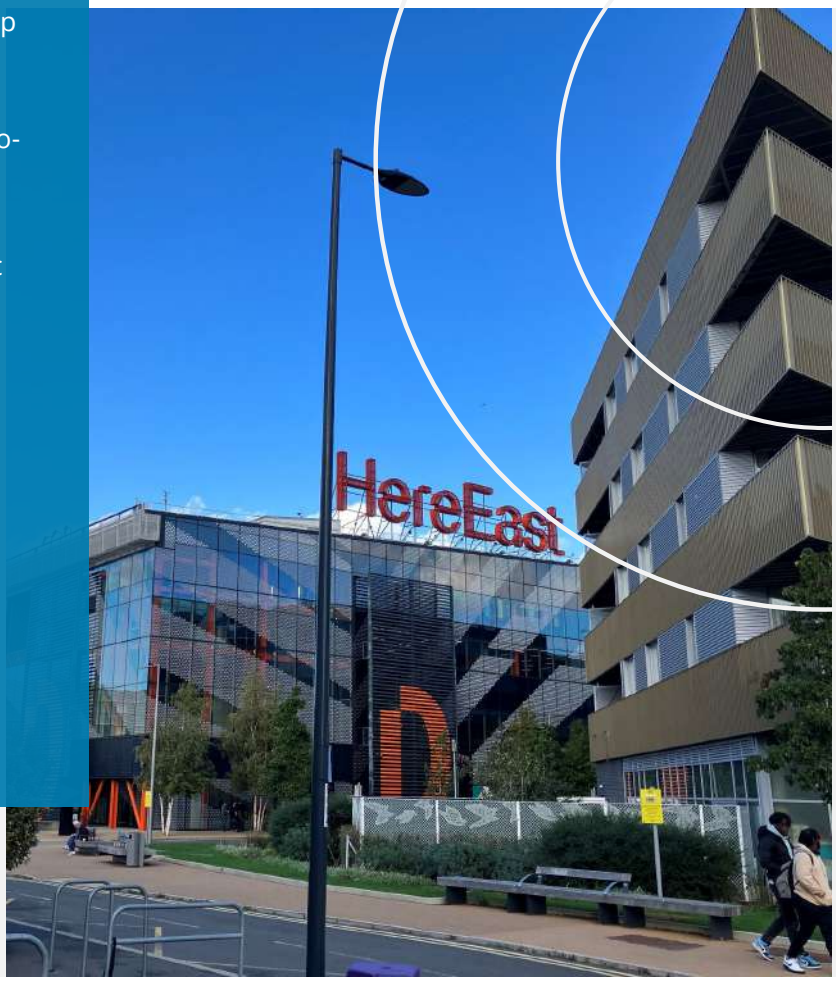
02 Formation of a collective resource group to promote good practice

03 Use industrial specialists in designing co-location developments

04 Encouraging the preparation of specific design briefs for industrial space

05 Creation of a digital platform of co-location opportunities

06 Inclusion of industrial experts in design and quality review panels



Contents

1 Introduction: Managing London's rapid growth

2 The GLA Industrial and Logistics Sounding Board Co-location Working Group

3 Co-location: A delicate balance

4 Key challenges for co-location: Balancing the needs of industrial and residential occupiers

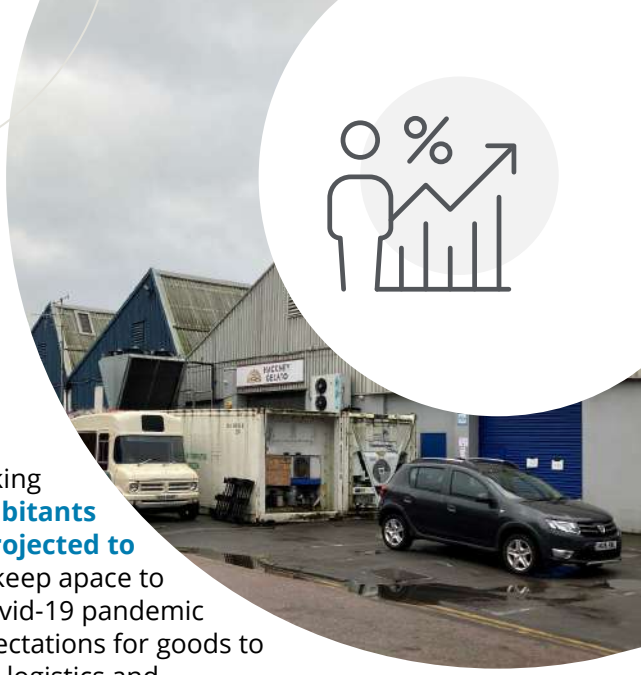
5 Recommendations from the Co-location Working Group

6 Conclusion

7 Participants in the Co-location Working Group

8 Bibliography

Introduction: Managing London's rapid growth



Industrial sites are critical to the growth of the London economy, working around the clock to fulfil the needs of the city's roughly **9 million inhabitants** – and these needs are expanding. By 2041, London's **population is projected to reach 10.8 million**[1] and the city's industrial supply chain will need to keep apace to support the resulting surge in demand for goods and services. The Covid-19 pandemic and rise of e-commerce have accelerated this demand; residents' expectations for goods to be delivered quickly to their door has led to high demand for last-mile logistics and warehousing facilities located near central London.[2]

The principal aim of Policy E4 of The London Plan (2021), 'Land for industry, logistics and services to support London's economic function', is to ensure that existing and future demand for industrial land is met, and that suitable premises for the various industrial uses London needs are available. Policy E4 supports a planned, monitored and managed approach to ensure the retention, enhancement and provision of this industrial space, in part through the designation of land as Strategic Industrial Locations (SIL) or Locally Significant Industrial Sites (LSIS).

Policy E7 of the London Plan, 'Industrial intensification, co-location and substitution', outlines that development plans and development proposals should support the aims of Policy E4 by proactively identifying opportunities to intensify the industrial capacity of industrial land. Where it is possible to intensify industrial floorspace on a site, Policy E7 identifies the potential for these industrial uses to be consolidated to support, although not in SIL, the 'co-location' of other uses on the site, such as residential uses.

The London Plan's approach to industrial land reflects data on release of land in recent years and predicted demand for space during the plan period. The land available for industrial uses in London is being depleted. Over the past 20 years, 24 per cent of London's industrial floorspace has been released for residential and other uses.[3] Between 2001 and 2020, roughly 1,500 hectares (ha) of industrial land in London was released (see Figure 1);[4] however, benchmarks produced through a 2017 study to inform the London Plan 2021 identified that only 9 ha can be released per year from 2016-2041 in order for demand to be met.[5] In 2020, there were roughly 7,000 ha of industrial land remaining in London, just over 30 per cent of which is not designated in accordance with the London Plan.[6]

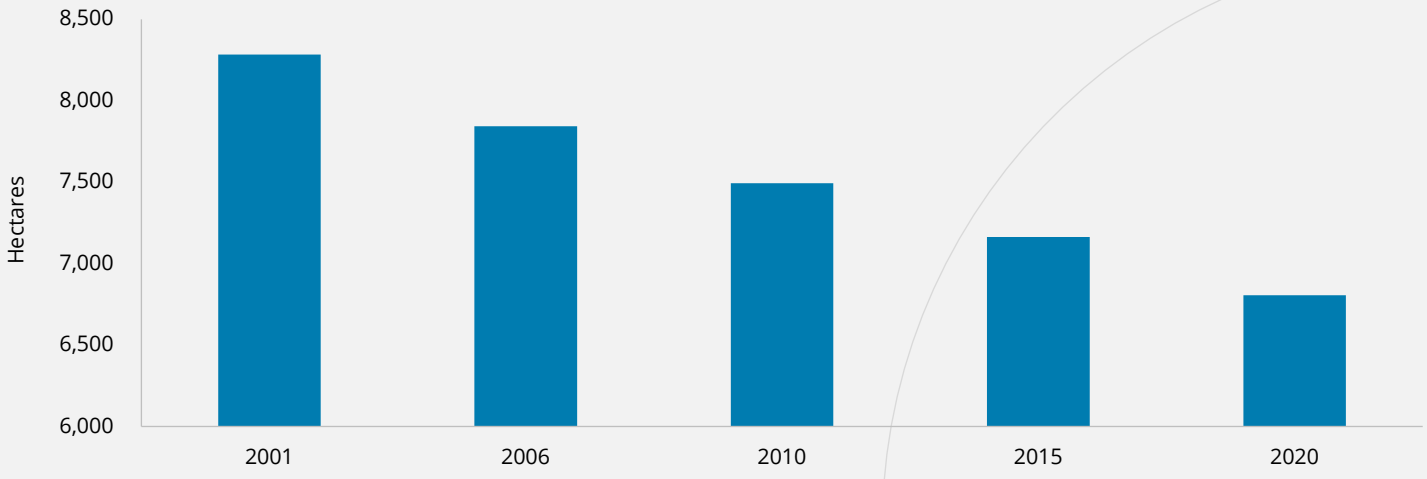


Figure 1: Land in industrial use in London from 2001 to 2020, in ha. Since 2001, the total stock has declined by 1,500 ha (Source: AECOM, London Industrial Land Supply Study 2020, Executive Summary, 2023)

While population growth has contributed to rising demand for housing and industrial space, the conversion of industrial land on a large scale for residential use has resulted in a loss of industrial supply and inability to meet demand. This is, represented by the fact that only 6 per cent of London's industrial land was vacant at the end of 2020[7] compared to 16 per cent in 2001[8] (see Figure 2). Planning guidance produced for the previous London Plan (2015) indicated that an industrial land vacancy rate of roughly 5 per cent would represent an efficiently functioning market.[9] The current low vacancy rate makes it difficult for industrial occupiers to find appropriate space that is affordable.[10]

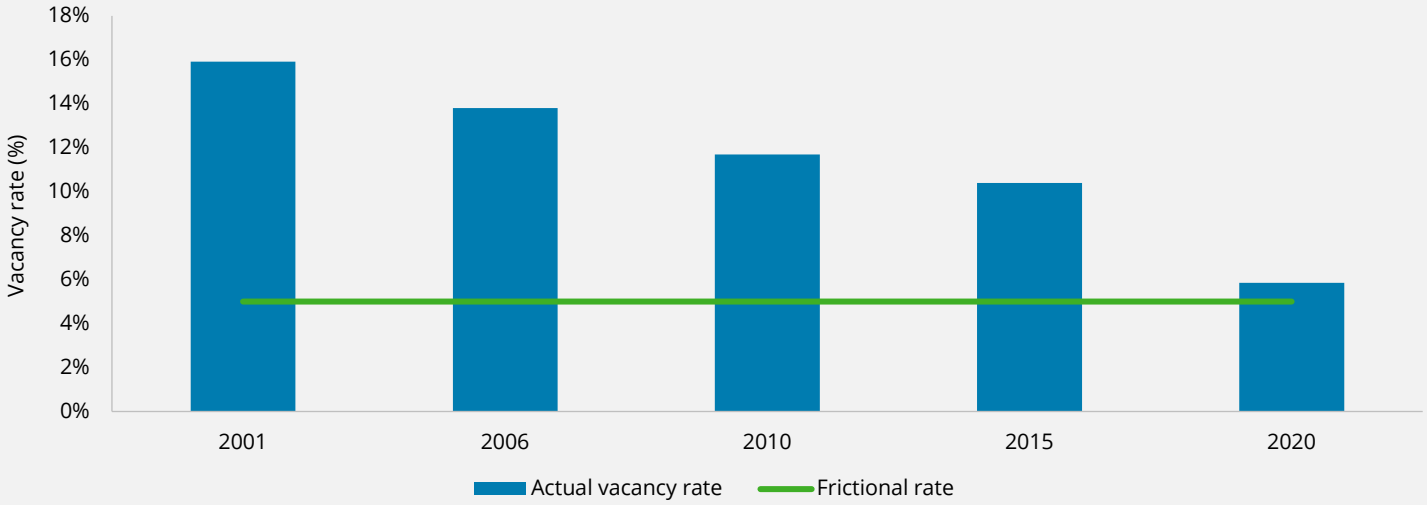


Figure 2: Core industrial land vacancy rate in London, 2001 to 2020 (Source: Greater London Authority)

To address these issues, London needs both robust residential and industrial space provision if its rapid growth is to be managed and the quality of life of its residents is to be maintained. It is the careful management of industrial land supply and its functions that can contribute to other planning priorities such as housing delivery.

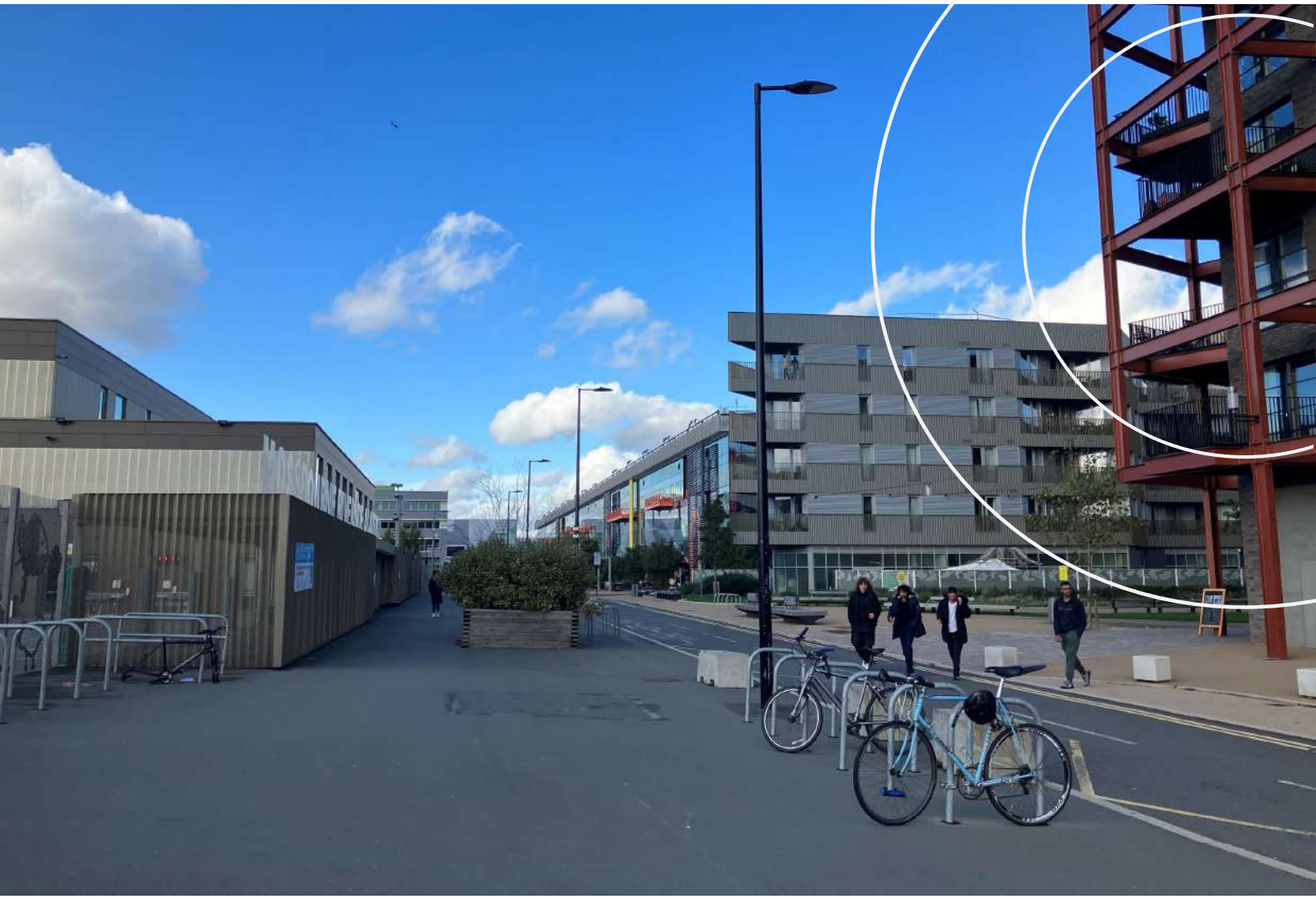
Industrial co-location represents one of the solutions

Co-location, as proposed in Policy E7 of the London Plan, presents an opportunity to locate industrial and other uses such as residential uses within a single development. In the first instance, borough-wide industrial space needs should be assessed, and sufficient space should be identified to accommodate uses not able to be co-located. The assessment should also consider suitable areas for industrial co-location developments.

Co-located uses may be arranged either side-by-side or vertically stacked. Whatever the selected arrangement for a site, Policy E7 states that priority should be given to ensuring that intensified industrial uses are delivered in the first instance and that the operation of the industrial occupier is not inhibited. In addition, appropriate amenity for residential occupiers should be secured through high quality design mitigation.

Since the adoption of the London Plan in 2021, a large number of co-location projects have been approved.[11] However, a limited number of co-location schemes have been implemented and occupied, as investors face the challenge of optimising space while balancing the needs of all occupiers.

At the core of co-location is the concept that rather than working at cross-purposes, industrial and residential developments can be mixed in a way which benefits both sectors and alleviates the competition for space. This report seeks to contribute to the collective effort to achieve the ambitions of Policy E7 by setting out the recommendations of a Co-location Working Group, a group of industry professionals focused on discussing how policy and practice can respond to the inherent challenges of co-location.



The GLA Industrial and Logistics Sounding Board Co-location Working Group

The Greater London Authority (GLA), in partnership with BusinessLDN, established the Industrial and Logistics Sounding Board (ILSB) in 2017 as an independent forum for industry professionals to engage with the GLA to formulate the draft London Plan policies in relation to industrial land uses. The ILSB scrutinised and provided recommendations on the content of draft policies for the now-published London Plan (2021), including Policy E7, which encourages the intensification of industrial land through higher plot ratios and expresses support for co-location. Following publication of the London Plan, the ILSB was revived in 2021, to focus on providing recommendations and feeding into guidance for the implementation of the London Plan policies.

This report contributes to the dialogue around the emergence of co-location in London by encapsulating the discussions of the Co-location Working Group (CWG) appointed by the ILSB. The CWG is a forum in which public and private sector industry professionals (planning consultants; architects; developers; local planning authority officers; policy makers; and higher education academics) bring their experience and knowledge to review and debate the challenges of delivering effective co-location projects (refer to the Appendix for the list of members of the CWG).

Chaired by ILSB member Jeremy Castle of Deloitte, the CWG first met in July 2022 to explore the possibilities for un-locking co-location development. The discussions of the CWG have not challenged the principle of co-location, but rather have focused on considering a range of issues that are seen as potential barriers to entry for the development of co-location projects, as well as identifying case studies to explore best practice and lessons learnt.

The topics discussed by the CWG and other specialists included:

- the need to manage competing land use demands;
- the affordability, viability and fundability of co-location;
- how to deliver industrial floorspace that meets business occupier requirements;
- how to mitigate conflict between uses, such as preserving residential amenity and enabling 24-hour operation of industrial space;
- the role of the planning system in the delivery of co-location schemes; and
- how to achieve long term sustainable and flexible co-location projects.

As with the other ILSB specialist working groups, the CWG was established to prepare a set of recommendations based on their research to support the GLA in further developing policy and guidance on the implementation of London Plan policy. Based on its discussions, the CWG has developed recommendations to ensure co-location is given the best chances of success as a new urban typology. It is intended that these insights will influence planning policy and design in the future, unlocking opportunities for co-location to help alleviate land pressures in accordance with London Plan policy, including supporting the preparation of London Plan Guidance.

Co-location: A delicate balance

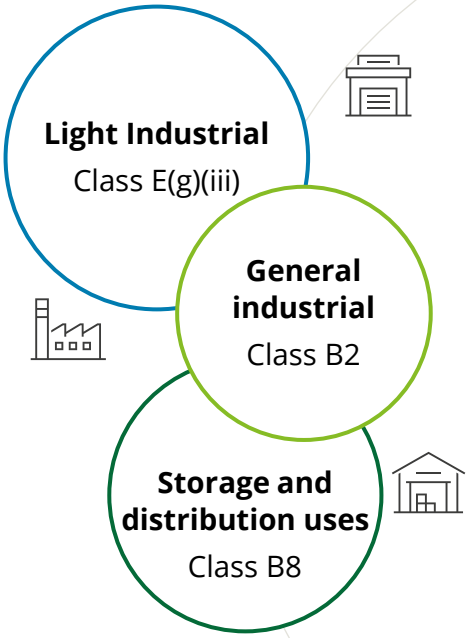
Co-location is an emerging development typology which has arisen to address two critical factors shaping London's development landscape:

The loss of designated industrial space across London, and the need to retain and intensify remaining industrial land; and

The need for new homes to accommodate London's rapidly growing population.

The London Plan recognises the importance of these issues and promotes both the provision of more housing[12] and the intensification of **light industrial** (use class E(g)(iii) (formerly use class B1(c)), **general industrial** (use class B2), and **storage and distribution uses** (use class B8)[13] across London.

By combining industrial and residential uses in developments in appropriate locations, co-location has the potential to maximise land efficiency through higher plot ratios in which residential density is optimised and the operational and space requirements of industrial occupiers are satisfied.



Recognising co-location's potential to satisfy the policy goals for both residential and industrial space provision, Policy E7 of the London Plan supports the possibility of co-location of industrial and other uses on industrial sites only where certain conditions are met, including:

- The planning application is not submitted in an ad-hoc manner, but as part of a plan-led or masterplanning process with the GLA and borough. The process should involve intensification and consolidation of SIL/LSIS, and co-location of industrial uses with residential uses should only be explored in LSIS, rather than SIL;
- The non-industrial uses do not compromise or inhibit the business needs of the industrial occupier, including the need for 24/7 operation;
- The industrial uses are completed in advance of occupation of residential element; and
- The design mitigates impacts upon residential amenity by considering safety, access, design quality, public realm, protection from vibration, noise and dust and agent of change principles.[14]

The requirements for co-location schemes in Policy E7 aim to address what the CWG has identified as the core challenge for co-location schemes: balancing residential and industrial occupiers' contrasting needs. Achieving this balance may be the key to unlocking co-location schemes across London.

Key challenges for co-location: Balancing the needs of industrial and residential occupiers

Across several discussions during 2022 and 2023, the CWG identified several operational and design challenges for co-location schemes. It became clear that these issues stem from the need to simultaneously protect residents' amenity while ensuring industrial operations are not inhibited.

The CWG harnessed members' professional experience to identify key operational and design challenges which can arise when balancing the needs of industrial and residential occupiers. Recent case studies were discussed in CWG meetings to illustrate how these challenges are being tackled through inventive design.

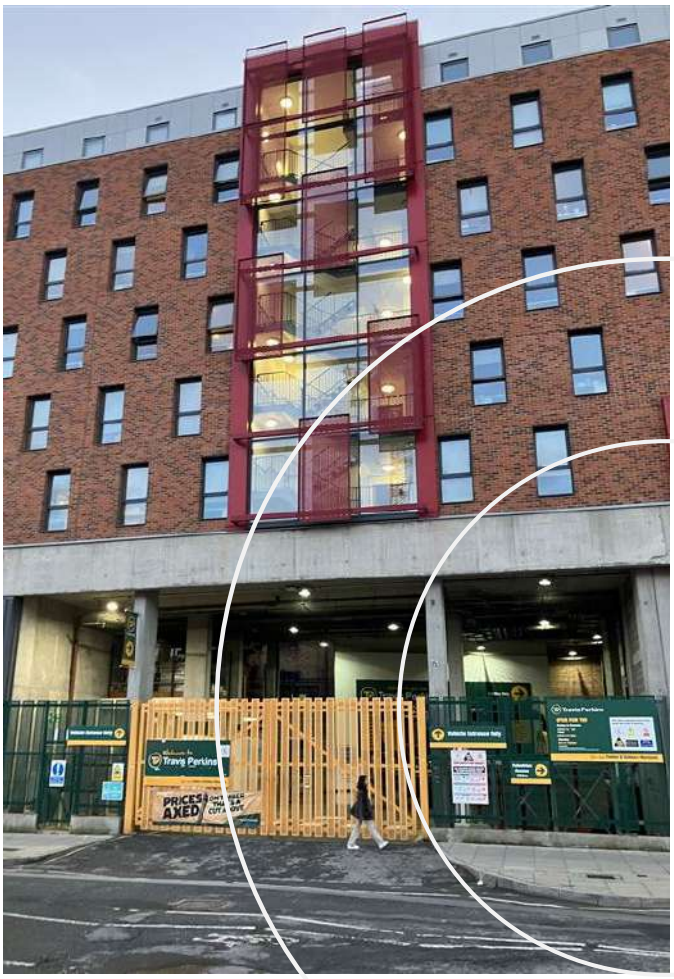
The case studies included within this report have been chosen for their illustrative value only, to demonstrate the design of the relationship between industrial and residential floorspace. The case studies have not been assessed for compliance with wider London Plan policies. As several of the case studies include SIL land, the introduction of non-industrial uses through co-location is subject to SIL boundary changes through Local Plan review processes.

Challenge 1: Choosing the best spatial arrangement for a site to protect residential amenity

Where not carefully considered, the spatial arrangement of a co-location scheme can cause tension between industrial occupiers' need for unrestricted servicing and operational arrangements and the safety and amenity of residents and pedestrians.

On many sites chosen for co-location, space is limited. Often the most efficient use of space while optimising viability is to "stack" the residential element above the industrial units in a vertical arrangement. To mitigate potential conflicts between the industrial and residential occupiers, creative technical design solutions have been prepared, such as elevated amenity spaces over transfer decks, with industrial servicing yards at ground level.

On larger sites, one design solution to protect occupiers' needs involves horizontal co-location of residential and industrial elements on separate portions of a site. A buffer zone of softer industrial uses or a physical barrier may be created to act as an active transition and interface between the sensitive main uses. This buffer insulates the residential from the industrial uses and enables the provision of unconstrained yard space for the industrial tenants and amenity space at ground level for residents.



Site area
5.3 ha

Case Study: Morden Wharf, Greenwich, London

Location: 215 Tunnel Avenue, Greenwich, London SE10 0QW

Planning ref. and Local Planning Authority: 20/1730/O (Royal Borough of Greenwich)

Applicant: U+I and Morden College

Planning Status: Hybrid planning permission granted in June 2022. Completion expected in January 2033.

Site area: 5.3 ha

Designation: Part Strategic Industrial Location ('SIL')

Proposed development: The outline portion of the scheme, with all matters reserved, sought consent to demolish the existing warehouse, office building and storage shed on the mostly-undeveloped site used for low-intensity industry. Following demolition, it was proposed to implement a phased, mixed-use development. This would include up to 1,500 homes, up to 17,311 sqm of commercial floorspace (use class E/E(g)/B2/B8/sui generis) and associated public realm and facilities. Full planning permission was sought for the refurbishment of an existing warehouse on site and construction of a mezzanine floor inside, along with an expansion of its use from industrial (class E(g)/B2/B8) to include restaurant/café/drinking establishment use. The total flexible employment space (use class E/B2/B8) across the scheme could measure up to 16,779 sqm.

How Morden Wharf responds to Challenge 1

- The design of this scheme horizontally co-locates the heavier industrial and residential uses.
- Within the SIL-designated portion of the site, the existing industrial uses are retained and intensified. The buildings will be flexible to accommodate any mix of use classes E/B2/B8, and it is proposed that potential occupiers could include a brewery or a last-mile logistics distribution warehouse. Intensification methods include the insertion of a mezzanine floor into one unit to create double height units.
- On the non-designated portion of the site, residential buildings will be activated through smaller-scale commercial and retail uses (use class E) at ground level.
- Residential buildings adjacent to industrial uses will be oriented away from the employment uses to avoid overlooking, and sound insulation will be installed to minimise noise, dust and vibration impacts. Further acoustic insultation to be incorporated for the homes is to be secured by condition.
- Public open space is provided on the non-SIL portion of the site, including a new 1.28 ha public park.
- Between the industrial and residential elements, on the boundary of the SIL, Building B01 acts as a "buffer building" which comprises flexible employment floorspace suitable for office use (use class E) (see Figures 3 and 4).
- The inclusion of a brewery (use class sui generis) within unit SWI was considered in the Planning Committee Report to be an appropriate buffer between the residential and industrial elements of the scheme, which would "*support placemaking and facilitate a smooth interface*" between uses (see Figure 3).[15]
- Vehicular access points and car parking areas for the industrial and residential uses are segregated to avoid conflicts.

Figure 3: Proposed ground and first floor uses parameter plan from the Morden Wharf application. A transition is visible across the site, with residential development located in taller buildings nearest to the River Thames (Buildings T02, T03 and T04, a buffer building of flexible employment floorspace in the centre (Building B01) and lower-rise heavy industrial floorspace alongside the main road (Building W01). (Source: Office for Metropolitan Architecture)

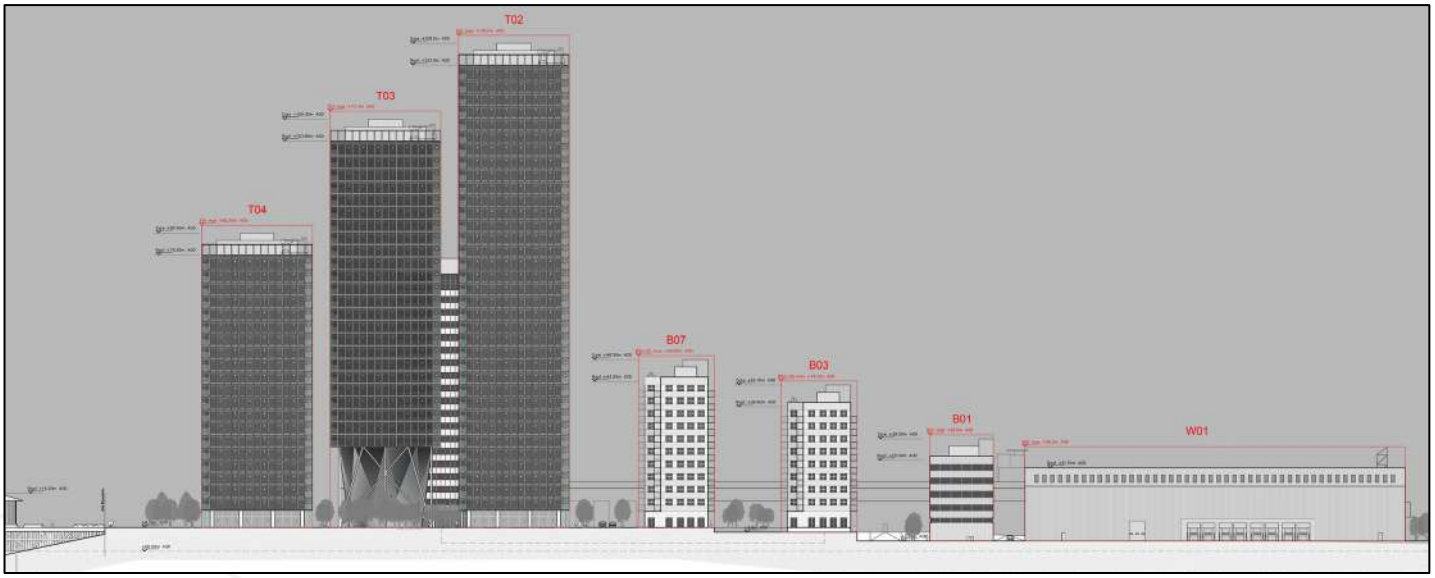


Figure 4: Elevation drawing for Morden Wharf, illustrating the transition from high-rise residential to heavy industry, with a section of buffer uses in the centre at Building B01. A transition in height is visible across the site, reflective of the appropriateness for tall buildings identified for the site, but a decrease in height gradually across the site to allow a transition to the low-rise housing and industrial character in the surrounding area. (Source: Office for Metropolitan Architecture)

Site area
0.77 ha

Case Study: 12 Thames Road, Barking

Location: 12 Thames Road, Barking

Planning ref. and Local Planning Authority: 19/01970/FUL (London Borough of Barking and Dagenham)

Applicant: London Borough of Barking and Dagenham

Planning Status: Planning permission was granted in March 2021. Construction was nearing completion in October 2023.

Site area: 0.77 ha

Designation: SIL

Proposed development: This is a small site surrounded predominantly by industrial uses. In this application, full planning permission was sought for c. 5,000 sqm of industrial floorspace at ground level across use classes E, B2 and B8. Above the industrial element, there would be 156 homes in buildings of up to 16 storeys. 1,785 sqm of outdoor amenity space would be provided at podium level, with an additional 1,321 sqm amenity space at roof terrace level.

How 12 Thames Road responds to Challenge 1

- Creating the right spatial arrangement was a key design challenge for this small site. The design has been developed to preserve residential amenity and provide businesses with the operational space they require.
- The option for ground floor amenity space is limited due to car park requirements and required access to the industrial service yard. Play and recreational space is therefore provided at podium and roof level (see Figure 6). The Planning Committee Report determined this to be an acceptable method and location for providing safe and secure amenity space, shielding residents from the industrial uses.
- Other design features include the separation of industrial uses from the homes through insulated party-walls, floors and ceilings to reduce noise.
- Most homes are dual-aspect, with private balconies and terraces facing away from the industrial yard to mitigate potential noise and amenity impacts (see Figure 5).

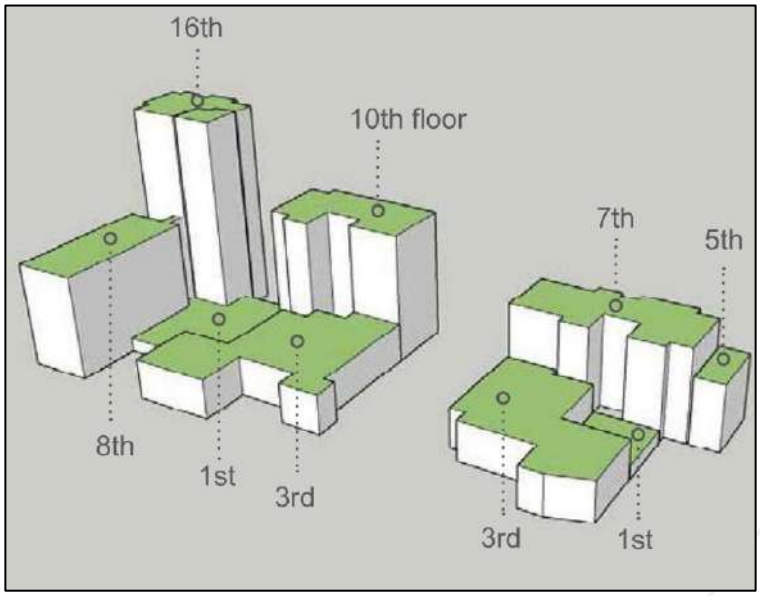


Figure 6: Location of amenity space at podium and roof level of the development, with heights indicated. This illustrates how amenity space can be provided where space is limited at ground level. (Source: BPTW, Design and Access Statement)

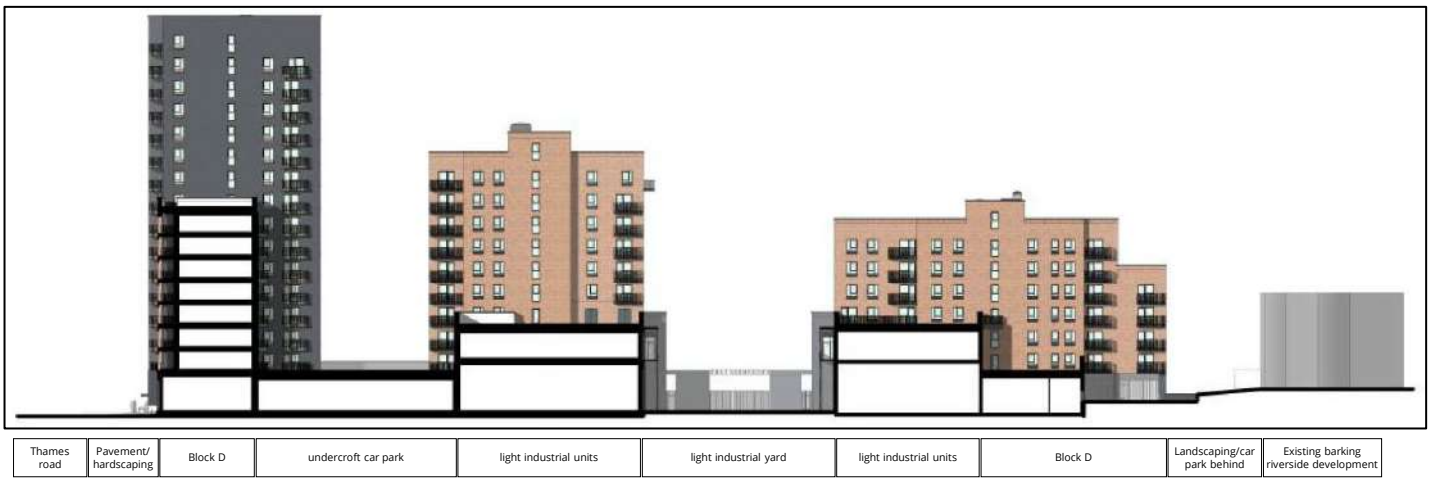


Figure 5: Elevation/section of the 12 Thames Road development, illustrating the location and height of the ground floor industrial element relative to the homes. Balconies for the homes are orientated facing away from the industrial yard space to minimise noise impacts. (Source: BPTW)

Comment: Achieving an appropriate spatial arrangement is a challenge on co-location sites of all sizes. The case studies of Morden Wharf and 12 Thames Road illustrate that, whether horizontally or vertically co-located, uses can be arranged in such a way that the amenity of residential occupiers is preserved despite their close proximity to active industrial operations.

Challenge 2: Maintaining operational flexibility for industrial occupiers

Many industrial occupiers will require unrestricted operating hours. This can potentially create a nuisance for residents in a co-location scheme through noise pollution, dust and vibration unless the development is designed to protect them from these effects.

Conversely, where the design of a co-location scheme prioritises the residential element, the function of the industrial element may resultingly be compromised. The CWG has observed that often where co-location schemes are delivered by residential developers, this can result in residential-led design with less attention given to the requirements of industrial occupiers, or the occupiers having to accept compromises in how they operate their units.

Design issues which inhibit the operation of the industrial occupier can take the form of limited goods vehicle access through the industrial unit due to numerous internal columns; constrained yard space; and lack of appropriate loading space or no loading bays being provided.

While there is high demand for general industry, storage and warehousing space in London, the difficulty in finding design solutions to mitigate the impact of these uses on residents has led many developers to build co-location schemes for light industrial occupiers only.

Site area
1.34 ha

Case Study: Vulcan Wharf, Stratford

Location: Cooks Road, Stratford, London E15 2PW

Planning ref. and Local Planning Authority: 20/00307/FUL (London Legacy Development Corporation)

Applicant: Vulcan Wharf Holdings LLP

Planning status: Planning permission granted in December 2021. Completion expected in January 2026.

Site area: 1.34 ha

Designation: Non-designated industrial site

Proposed development: Full planning permission was sought to demolish the existing low-rise industrial buildings and redevelop the site to accommodate mixed-use development. This would include 457 homes (use class C3) in buildings ranging up to 14 storeys in height. There would be a total of 9,088 sqm of industrial space proposed, including 5,594sqm (GEA) of storage and distribution floorspace (use class B8) and 3,494sqm (GEA) of light industrial floorspace (use class E). In addition, 180sqm (GEA) of retail floorspace (use class E) would be provided.

How Vulcan Wharf responds to Challenge 2

- These proposals would increase the provision of employment floorspace on the site by 6,324 sqm (GIA), by accommodating last-mile logistics occupiers (use class B8) and light industrial maker spaces (use class E) at ground and podium level.
- The transport elements of the scheme aim to provide pedestrian safety while avoiding restriction of industrial occupiers' needs. The units accommodating use class B8 and E have double height ceilings. The units are accessed directly from the main road through single service entrances for large vehicles. This concentrates industrial vehicle movement in certain areas and preserves other portions of the site exclusively for pedestrian use, such as the canal banks.
- The B8 uses are arranged around an internal loading yard, providing an enclosed vehicle turning area for equipment which may generate noise, shielding residents from noise and vibration (see Figure 7). A 2m high solid screen surrounds the perimeter of the podium level to insulate residents from industrial noise, and for this reason the use of electric vehicles by industrial tenants is also encouraged.
- Residential amenity is designed-in through features such as the provision of 3,228 sqm of private amenity space through balconies for all homes, both inset and projecting. Residents will also have access to 4,390 sqm of communal amenity space provided at podium level.
- Overall, the London Legacy Development Corporation Planning Committee Report considered that the design of the scheme was *"strategically arranged to allow the employment uses to operate on a 24-hour basis without compromising the function of the employment use or residential amenity".*[16]

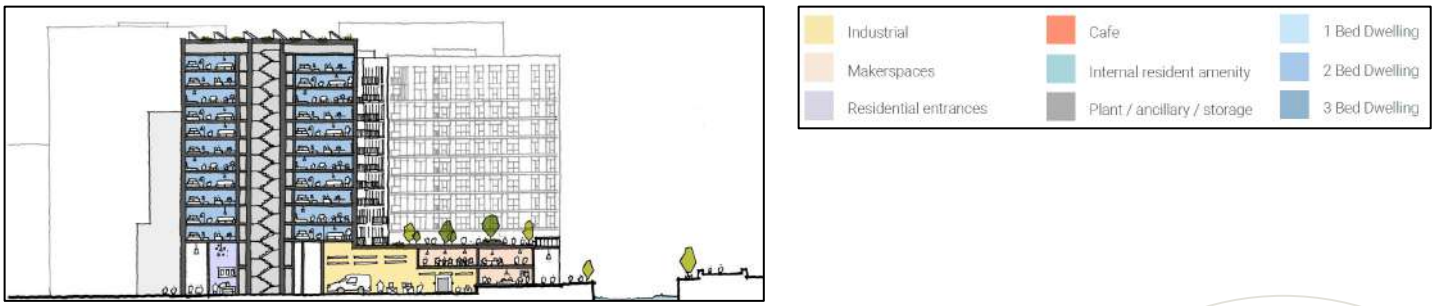


Figure 7: Indicative sketch section of Vulcan Wharf, illustrating the double-height ceilings for both use class E and B8 spaces. The internal loading yard is also shown, with amenity space for residents at podium level, industrial and residential uses (Source: Assael and Metropolitan Workshop)

Site area
0.43 ha

Case Study: 227-255 Ilderton Road, Southwark

Location: 227-255 Ilderton Road, Southwark, London SE15 1NS

Planning ref. and Local Planning Authority: 19/AP/1773
(London Borough of Southwark)

Applicant: Leathams Property Development Ltd. / Barratt

Planning Status: Planning permission granted in May 2019. Completion due 2025.

Site area: 0.43 ha

Designation: SIL

Proposal: Full planning permission was sought for a mixed-use development of buildings ranging from 2 to 28 storeys in height. At ground and mezzanine level, 2,184 sqm of flexible industrial floorspace (use classes E/B8) would be provided, as well as a 598 sqm internal service yard. At podium level, 1,422 sqm of amenity and play space would be provided. Above, there would be 253 homes.

How Ilderton Road responds to Challenge 2

- These proposals result in a small uplift of over 150 sqm in B8 industrial floorspace from previous provision on site.
- The Southwark Council Planning Committee Report considered the proposal to be "*exemplary*" for "*successfully combining industrial and residential uses in a carefully considered design led approach*". This includes the "*inherently flexible*" design of the ground-floor industrial element, with three optional floor layouts to allow for subdivision of space for different size occupiers and optional office space facing the road to maximise active frontage (see Figure 8). The space was considered to offer "*good provision for operational requirements for businesses*", through double height ceilings, adequate yard space and a minimal number of internal columns.
- The internal loading yard prevents congested vehicular movement on the exterior the building. It is located away from any residential entrances to avoid potential conflict. The internal yard is designed to shield residential occupiers from noise and therefore provide flexibility for industrial tenants to operate 24 hours a day if necessary.
- The public realm is designed to avoid interference with the industrial element, including amenity space located at podium level. The scheme illustrates the design solutions possible to avoid businesses having to compromise on operational space where space restrictions necessitate vertical co-location.

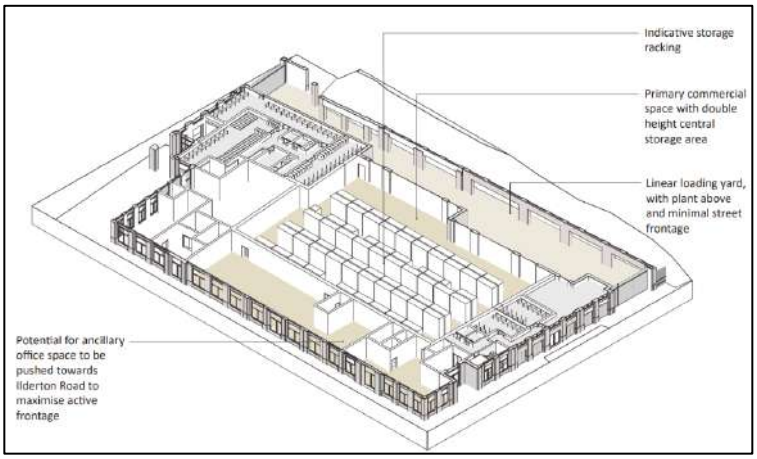


Figure 8: Cutaway of the ground floor of Ilderton Road, with main commercial space highlighted. Design features enhance the flexibility of the industrial floor space, allowing the units to accommodate a variety of potential occupiers
(Source: Maccreanor Lavington)

Comment: Even on small sites which necessitate stacking of residential uses above industrial units, design features can provide industrial occupiers with the space and freedom they need to operate. Vulcan Wharf and Ilderton Road illustrate how flexibility can be designed-in to suit the operational needs of a variety of industrial occupiers, including logistics, while avoiding conflict with residential uses above. However, site constraints can often make it difficult to achieve all co-location objectives, leading to compromised layouts for one or other occupier type.

Case Study: Travis Perkins, St Pancras Way, Camden, London

Site area
0.47 ha

Location: 11-13 St Pancras Way, London NW1 0PT

Planning ref. and Local Planning Authority: 2011/1586/P (London Borough of Camden)

Applicant: Unite Group plc and Travis Perkins plc

Planning Status: Planning permission was granted in October 2011. Construction was completed in 2014.

Site area: 0.47 ha

Designation: Non-designated industrial site

Proposed development: Planning permission was sought for the erection of a 10 storey building, with a 3,877 sqm builders merchant (use class B8/Sui Generis) at ground and mezzanine level, and 563 student flats on upper floors. A builders merchant existed previously on site, which the Planning Committee Report notes was "*one of Travis Perkins most profitable sites in the country*",[17] and as such an upgraded business facility was sought. It was intended that the proposals would result in an increase in floorspace of 764 sqm and improved delivery and servicing arrangements at ground floor, with an increase in enclosed storage area and an on site vehicular access road and servicing bays.

How Travis Perkins St Pancras responds to Challenge 2

- Responding to the limited space on this small site, this scheme was designed with the residential element vertically stacked above the industrial element (see Figure 9). This allowed for the builders merchant to operate from ground level in a unit with internal floor to ceiling heights of nearly 6m, with on site servicing enabled.
- The Planning Committee Report described that suitable design elements were incorporated in the scheme to avoid any interference of the residential element with the operation of the industrial occupier. In particular, the provision of generous floor-to-ceiling heights in the ground floor industrial unit were seen as appropriate to raise the residential element to a height which suitably buffered noise from vehicles.

Comment: The design of the industrial element involved the incorporation of numerous internal columns and shelves within the operating floor, which restricts the movement of servicing vehicles within the internal space (see Figure 10). The industrial occupier had to adapt its operations around this design element. Co-location schemes seeking to implement a stacked arrangement of non-industrial uses above an industrial unit should aim for a design which avoids interference with the operational requirements of the occupier.

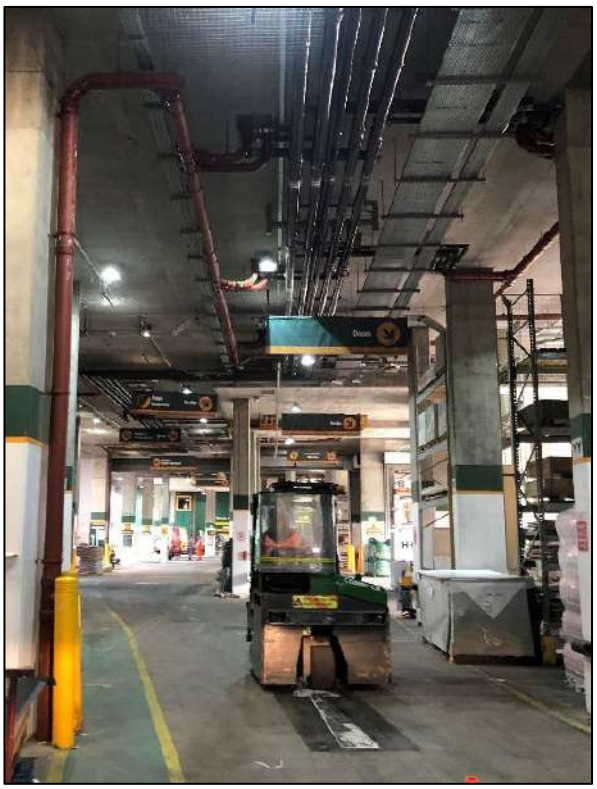


Figure 10: Within the completed Travis Perkins scheme, the number and location of internal columns and shelves has created practical challenges for the movement of vehicles within the internal space. (Source: Deloitte)

Challenge 3: Ensuring complementary land uses

While demand is greatest for use class B2 and B8 industrial space, co-location schemes have mainly provided use class E (former use class B1c) light industrial uses.[18] Concerns that heavier industrial uses might cause disruption to residential occupiers has contributed to the displacement of these uses outside of residential areas. However, innovative design can result in a co-location scheme that provides heavier industrial uses in a manner which does not detract from residents' amenity.

In order to achieve this balance, the type of industrial and logistics tenants appropriate for a site should be explored in the very early stages of design development, and where possible at the Local Plan-making stage.

The aim is to develop a design which meets the eventual occupiers' specific needs and that the residential element responds to this appropriately. Occupiers could be chosen to provide a balance of both day and night-time economy to create an active, safe space at all hours that can become a destination for a wider range of customers. On sites surrounded by residential areas, light industrial uses (use class E) such as maker space, artists' studios and start-ups can act as "softer" uses providing a buffer between heavier industrial uses located on another part of the scheme.

Each of these considerations can assist in tackling negative perceptions of living near to industrial uses, by creating an activated, safe and high-quality environment where residential amenity is safeguarded and softer industrial activities are integrated into the local neighbourhood. At the same time, heavier industrial uses on the site may be retained and consolidated in a clustered area.

Case Study: Blackhorse Lane Strategic Industrial Location (SIL), LB Waltham Forest

The Blackhorse Lane SIL Masterplan Framework (2022) prepared by the London Borough of Waltham Forest has taken an "industry first"[19] approach to identify opportunities to consolidate and intensify the existing industrial uses within new bespoke, modern buildings in the retained SIL boundary to the north of the area (see Figure 11). This, in turn, enables the introduction of a mix of industrial, residential and associated commercial/community/cultural uses to the south (i.e. within the re-designated area of Locally Significant Industrial Site (LSIS)) (see Figure 12).

The comprehensive redevelopment of the Blackhorse Lane SIL provides an example of the potential for neighbouring sites to complement one another to strategically support intensification of industry in an area, while also creating an active public realm and residential-facing environment that relate well to the surrounding existing and future residential community.

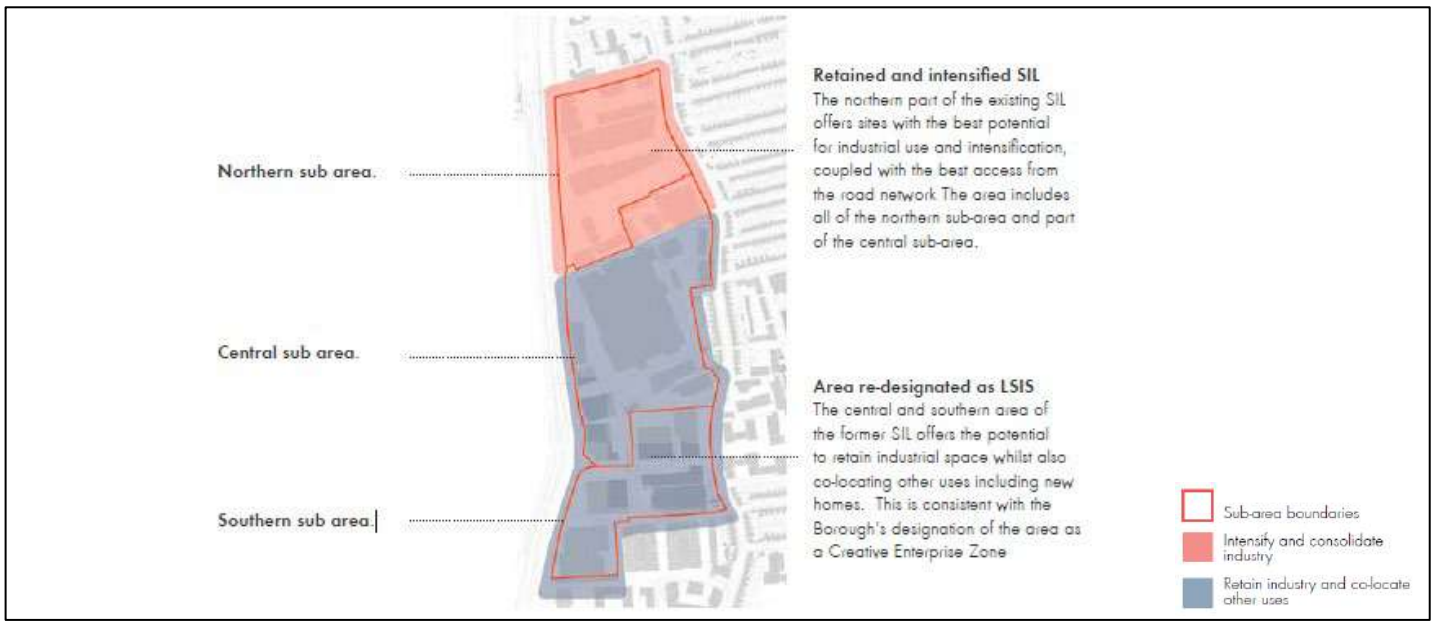


Figure 11: Extract from Blackhorse Lane SIL Masterplan Framework 2022 (Source: LB Waltham Forest)

Figure 12: Map showing the extent of the Blackhorse Lane SIL/LSIS and relevant schemes (Source: Deloitte)

Uplands Business Park, LB Waltham Forest

Location: Blackhorse Lane, Walthamstow

Planning ref. and Local Planning Authority: 222739 (London Borough of Waltham Forest)

Planning status: Application submitted in September 2022; Waltham Forest Planning Committee resolved to grant planning permission on 05 December 2023. Estimated completion year: 2034.

Site area: 5.45 ha

Proposed development: This industrial site currently supports creative, light industrial and storage and distribution uses. This proposal seeks to intensify the industrial floorspace on the site and co-locate residential use through a masterplan approach. The spatial arrangement is horizontal co-location, with heavier industrial uses concentrated in the northern portion of the site, and lighter industrial and residential uses located in the southern portion, in line with the Blackhorse Lane SIL Masterplan (see Figure 13). In total, this hybrid planning application proposes to deliver 33,000 sqm of stacked industrial floorspace (use classes E(g)(ii and iii), B2, and B8), 1,790 homes, 5,000 sqm of Classes E, F and Sui Generis (drinking establishment) floorspace, and 1.8 ha of new public realm and open space. Buildings on site will range up to 18 storeys in height.

Site area
5.45 ha

Figure 13: Proposed ground floor uses plan for Uplands Business Park, illustrating the spatial separation of industrial and residential uses on the site (Source: Allies and Morrison)

Figure 14: Visualisation of industrial yard space at Uplands Business Park in the evening, illustrating the activation of the industrial space outside of operating hours with the inclusion of uses such as a brewery (Source: Allies and Morrison)

Lockwood Way Industrial Estate, LB Waltham Forest

Site area
0.48 ha

Location: Lockwood Way, Walthamstow, London E17 5RB

Planning ref. and Local Planning Authority: 210640 (London Borough of Waltham Forest)

Applicant: The London Borough of Waltham Forest

Planning status: Advertisement consent was granted in April 2021. Works completed in June 2022.

Site area: 0.48 ha

Proposed development: The London Borough of Waltham Forest, assisted by architects We Made That, funded the transformation of this industrial estate through implementation of physical interventions in the public realm to attract visitors and occupiers. The interventions, developed through engagement with existing tenants, included colourful wayfinding signage, artwork, landscaping, lighting and building frontage improvements.

Figure 15: An elevation of a unit at Lockwood Way Industrial Estate, illustrating the public realm interventions (Source: We Made That)

How these cases at Blackhorse Lane SIL respond to Challenge 3

The development activity within the Blackhorse Lane SIL demonstrates the potential for neighbouring sites to provide industrial uses which create active spaces that are inviting to the local community and are appropriate for co-location of residential uses. Within the Blackhorse Lane SIL, developments are focused around enhancing industrial uses which are complementary to promoting a vibrant interface with the surrounding community and attract footfall outside of business hours (see Figure 14). This way, the intensification of industry can assist in building a sense of place identity and improve perceptions of living near industrial uses. The placemaking interventions at Lockwood Way have the potential to contribute positively to the appropriate mix of uses.

At Lockwood Way, the units are currently occupied by tenants including brewers, a winery and a bakery, which attract footfall outside of regular business hours and on the weekend. The new interventions aim to create a legible and inviting environment for pedestrians to encourage activity within the area (see Figure 15). At Uplands, the inclusion of light industrial and sui generis uses such as a brewery intends to initiate the same visitor response.

However, activation of the pedestrian and residential space does not come at the expense of the functionality of the industrial space. At Lockwood Way Industrial Estate, the placemaking interventions aim to create a welcoming public realm without compromising the provision of adequate yard and loading space. Similarly, the design of Uplands Business Park maintains separation of heavy industrial and residential uses, to avoid either use being compromised.

The existing and proposed developments at Blackhorse Lane SIL illustrate how schemes can be comprehensively designed for industrial uses to provide an active interface with the existing residential community, and for additional residential uses to be co-located alongside them through intentional selection of occupiers and arrangement of uses.

Comment: The case studies at Blackhorse Lane SIL illustrate that creating a co-location scheme that is accessible to the community does not necessitate the displacement of heavier industrial uses. These uses can be adequately buffered from other portions of the site containing lighter industrial occupiers, which can activate the public realm and generate footfall from nearby residents. In this way, the appropriate mix and arrangement of occupiers for a co-location scheme can be considered strategically to ensure the delivery of essential heavier industrial uses.

Recommendations from the Co-location Working Group

From its discussions of the key challenges for delivering co-location schemes, the CWG distilled six recommendations to support emerging co-location policy. These insights contribute to the dialogue around co-location by combining the CWG's cross-sector experience to identify how industry professionals and policymakers can work towards creating a toolkit for the successful implementation of co-location schemes from project inception to completion.

These recommendations have been presented to the wider ILSB and encourage:

- collaboration between officers from Local Authorities and professionals from the private sector to share knowledge and develop design principles for delivering successful co-location schemes to balance the priority given to the, nonetheless crucial, housing delivery;
- the early assessment and plan-led re-designation of industrial land;
- the preparation of a shared design brief at the design phase;
- incorporation of specialist knowledge groups during the design phase;
- eventual Design and Quality Review Panel review by specialists; and
- digital recording of all stages of the process for monitoring.

Recommendation 1: Engage in plan-making / masterplanning

In 2020, 66 per cent (4,301 ha) of London's industrial capacity was on designated land[20] in accordance with London Plan policy.[21] SIL and LSIS designation should continue to be subject to its own borough-level review process to enable the identification of sites that are crucial to sustaining more traditional industrial needs across London, which are likely to require larger floorplates and more flexible operating environments. The CWG recommends that a co-ordinated masterplan process be led by the GLA alongside the relevant Local Authorities to focus intensification, consolidation and co-location across a portfolio of appropriate industrial sites collectively contributing to London-wide needs.

Identified industrial sites should be subject to masterplanning to assess their suitability for co-location by designing-out areas of anticipated challenges, such as access and servicing, as well as noise and provision of high-quality amenity space. London boroughs should engage with relevant landowners through the plan-led process to develop a set of site-specific design and development principles for successful co-location. Local planning authorities could introduce a broader, criteria-based screening of particular sites.

Recommendation 2: Form a collective resource group

The CWG recommends the creation of an independent group that can scrutinise evidence informing plan-making, raise evolving challenges in the sector and promote good practice. This group would be comprised of experts and practitioners from both the private and public sector, such as private sector professionals, academics or policymakers.

The group would serve an advisory function to assist Local Authorities in identifying and addressing challenges of developing masterplans for co-location by providing insight on occupational requirements, innovative design and up-to-date views on market challenges.

Similar to other Mayoral insight groups such as the London Design Review Panel and Mayoral Housing Taskforce, members could be appointed by the Mayor for their exceptional skills and experience. A charter could be produced through the Mayor of London to provide the basis of the group's role and ensure that advice is given in a proportionate, consistent manner.

Recommendation 3: Use industrial specialists in designing co-location developments

The principle of co-location has emerged from the need to optimise land use to sustain the rapid growth of London's population by efficiently mixing neighbourly industrial activities with other uses, primarily homes. These 'beds and sheds' schemes are predominantly led by residential developers seeking to optimise development on underutilised land. In some instances, a focus on optimising residential layouts and delivery has been found to provide compromised homes and inadequate provision of employment spaces.

Building upon knowledge sharing and the forming of a collective voice (Recommendation 2), co-location schemes could benefit from increased collaboration between residential and industrial developers and architects. If there is stronger collaboration between experts, co-location schemes should be providing for residential and industrial users without compromises. Such an approach should be informed by clear masterplans and site allocation exercises led by Local Authorities (Recommendation 1).

Recommendation 4: Encourage the preparation of specific design briefs for industrial space

Preliminary briefs are usually prepared at inception stage (RIBA 0) by developers to describe delivery and strategic objectives that should inform ideation from project teams. Such briefs are informed by planning policies as well as developers' commercial challenges. On sites that have been identified as appropriate for co-location, project teams should be encouraged to formulate clear design briefs as early as possible to address the requirements for industrial space and avoid issues and afterthoughts at later stages.

Topics to be discussed can include spatial priorities and occupiers' requirements as well as user interfaces with context and wider community integration. Briefs also should address the need to provide high quality residential accommodation that is not impacted by industrial activities. Such briefs should enable the appointment of project teams that can pay particular attention to considering their proposals and specialist area of focus in such mixed-use environments. This process should also assist in documenting compromises that arise throughout design development for co-location.

Recommendation 5: Create a digital platform of co-location opportunities

While all planning applications can be accessed online through the relevant London borough's planning register, planning applications of a sufficiently large scale, deemed as being "of potential strategic importance",[22] are referrable to the GLA. These are also accessible through a separate GLA online register, allowing users to track an application's progress.

Given the strategic nature of designated and non-designated industrial land and the ongoing monitoring of its supply (see London Industrial Land Supply Study 2020 published by the GLA in March 2023), a digital method could be developed to share data specifically about co-location schemes so that bespoke analysis can be undertaken.

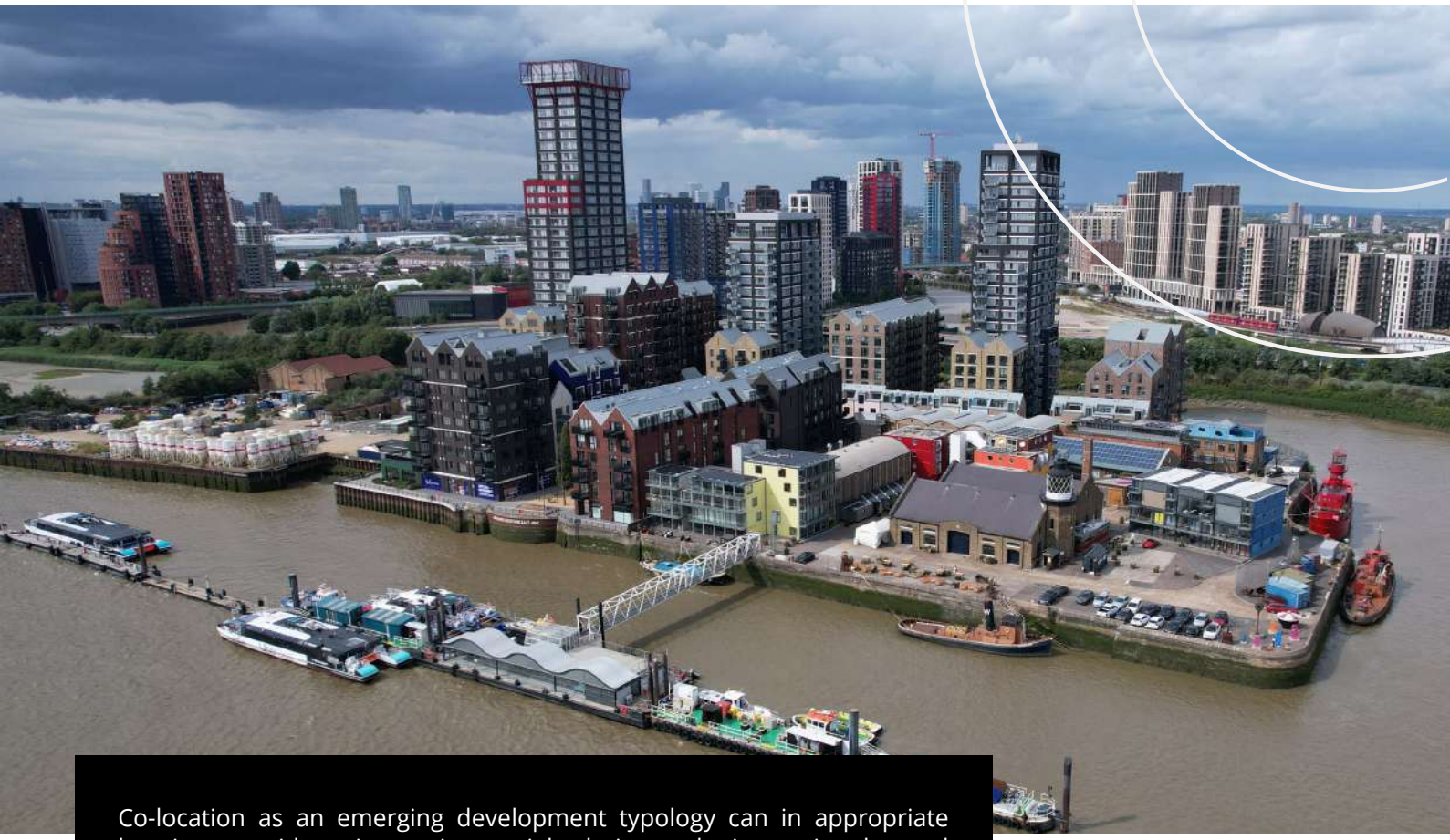
Local Authorities should be encouraged to share information on masterplanning (Recommendation 1) and co-location schemes in a standardised manner to feed into the Planning London Datahub. For instance, when co-location schemes go through the GLA referral process, and therefore transition from local to strategic in importance, information on the application should be gathered from the point of submission and be fed into the digital planning Datahub run by the GLA. This can continuously improve knowledge sharing for co-location.

Recommendation 6: Include industrial experts in design and quality review panels

Design Review Panels across Local Authorities provide independent reviews of pre-application schemes to deliver design excellence. Panellists act as critical overseers to encourage high quality development before the design and parameters of a scheme become fixed. Panels are usually comprised of professionals representing different professions within the built environment, although the CWG has observed that panel members are often not experts in industrial design.

Design Review Panels occasionally accommodate specialist input where appropriate. With the aim of making co-location work across London, acknowledging the emerging nature of this typology, local authorities should select industrial specialists to be a part of the relevant panels, to ensure they are included in pre-application discussions. These individuals could be drawn from the collective resource group proposed at Recommendation 2 and could continuously feedback to the group and the Planning London Datahub on innovation and challenges arising in practice.

Conclusion



Co-location as an emerging development typology can in appropriate locations provide an innovative spatial solution to the increasing demand for both industrial and residential space in London. There is potential for co-location to run parallel to the review and intensification of designated industrial land, where uses intensified through co-location can remove pressure from sites that can be retained for the heavier industrial activities London needs.

However, achieving the right balance between residential and industrial uses in a way which meets the needs of both occupiers requires good design that takes a tailored approach to a specific site. Sites appropriate for co-location and an appropriate mix of uses should be identified through coordination between local and regional government. From the design stage, project teams should collaborate to identify site-specific criteria including appropriate occupiers and spatial arrangement.

Looking ahead, emerging London Plan Guidance on industrial land will help to advance the conversation around co-location and build upon the discussions and recommendations of the Co-location Working Group. It is intended that through existing forums and new channels recommended by the CWG, policy makers and private-sector professionals can contribute to building a collective knowledge and methodology that leads to successful delivery of co-location schemes in London.

Participants in the Co-location Working Group

Jeremy Castle
Chair, Deloitte

Celeste Giusti
Greater London Authority

Alix de Nercy
Deloitte

Edward Jones
London Borough of Enfield

Laura Elias
SEGRO

Ella Randel-Khan
SEGRO

Tessa English
JLL

Antonia McLean
Transport for London

Angie Fenton
Quod

John Oosthuizen
Transport for London

Jessica Ferm
University College London

Jorn Peters
Greater London Authority

Catriona Fraser
Turley

Ben Posford
CBRE

Evangelia Georgali
Greater London Authority

Matthew Wong
London Borough of Tower Hamlets

Amy Gilham
Turley

For further information contact:

Jeremy Castle

jcastle@deloitte.co.uk / +44 020 7007 1237

Jeremy Castle has over 30 years of experience in planning and development. He joined Deloitte in 2012 and is an experienced leader of teams for large scale developments and strategic projects.

Jeremy has led the planning of a wide range of projects that include a mix of uses that closely interact. For example, he was Planning Director at Battersea Power Station, where the outline planning permission had to address the proximity of residential development to existing safeguarded wharves. During his time at Deloitte, he has worked on many projects in which commercial buildings have had to address impacts on neighbouring homes.

Jeremy has an extensive understanding of industrial development. While working at Legal & General, he led the planning of industrial projects around the UK. He currently leads the team that has secured planning permission for relocation of three wholesale food markets to Dagenham Dock and advises the development of industrial portfolios. He is currently involved in multiple projects across London that involve the co-location of industrial and other uses.

Jeremy is a member of the GLA's Industrial & Logistics Sounding Board, provided research support to BusinessLDN's Place Commission into how London maintains its position as a global city and chairs the ILSB Co-location Working Group.

Alix de Nercy

adenercy@deloitte.co.uk / +44 020 7007 9485

Alix is an Assistant Director in Real Assets Advisory. Alix is a Full Chartered Member of the RTPI with over eight years industry experience providing tailored strategic advice to a variety of clients from both the Private and the Public Sector, balancing their objectives and financial constraints with the views of Planning Authorities.

Since 2019, Alix has been providing town planning advice to major industrial and commercial tenants in London, from which she has gained valuable experience in understanding operational requirements and day-to-day activities of traders. Building upon this experience, Alix continues to show a keen interest in exploring solutions to the intensification and integration of critical industrial uses in our cities.

Bibliography

[1] The Greater London Authority, *The London Plan*, 2021, p. 15.

[2] New London Architecture, *Industrial and Logistics: Can London Deliver?*, 2023, p. 14.

[3] Centre for London, Making Space: *Accommodating London's industrial future*, 2022, p. 2.

[4] The Greater London Authority, *The London Plan*, p. 250.

[5] CAG Consultants, *London Industrial Land Demand: Final report*, 2017, p. 211.

[6] AECOM, *London Industrial Land Supply 2020*, 2023, pp. 29 and 49.

[7] AECOM, *London Industrial Land Supply Study 2020* Executive Summary, 2023, p. 25.

[8] Centre for London, *Making Space: Accommodating London's industrial future*, p. 2.

[9] Mayor of London, *Land for Industry and Transport: Supplementary Planning Guidance*, 2012, p. 31.

[10] Centre for London, *Making Space: Accommodating London's industrial future*, p. 14.

[11] Turley, *Co-Location in London: Is it still stacking up?*, 2023, pp. 8-9.

[12] The Greater London Authority, *The London Plan, Policy* H1 'Increasing housing supply'.

[13] The Greater London Authority, *The London Plan*, *Policy* E7 'Industrial intensification, co-location and substitution'.

[14] The Greater London Authority, *The London Plan*, *Policy* E7(B) and (D).

[15] Royal Borough of Greenwich Planning Board, Planning Board Report for Application ref. 20/1730/O, September 2021, para 12.36.

[16] London Legacy Development Corporation Planning Decisions Committee, Planning Committee Report for Application ref. 20/00307/FUL, December 2020, para 10.18.

[17] London Borough of Camden Planning Committee, Planning Committee Report for Application ref. 2011/1586/P, March 2011, para 6.2.2.

[18] Turley, *Co-location in London: Is it still stacking up?*, p. 15.

[19] BLACKHORSE LANE, Strategic Industrial Location, Masterplan Framework Stage 2 (March 2022)

[20] AECOM, *London Industrial Land Supply Study 2020*, pp. 44 and 50.

[21] The Greater London Authority, *The London Plan*, Policy E5 'Strategic Industrial Locations' and Policy E6 'Locally Significant Industrial Sites'.

[22] The Town and Country Planning (Mayor of London) Order 2008, section 4.