

WHAT IS A B8 'LAST MILE' USE IN THE CITY ENVIRONMENT?

PURPOSE

This document has been prepared to provide further detail on the operational approach of a modern final mile delivery depot (B8 use class) in the context of an inner-city location and SEGRO's proposals for 3-6 Spring Place, Kentish Town. The B8 planning use class (storage or distribution) is broad, however, the operational nature of a B8 use class in inner city locations is very different to a B8 regional distribution model, which this report seeks to expand on, in addition to explaining the numerous benefits of a City Depot delivery model.

The details within have been created in conjunction with Rob Fowler (Fowler Consulting), a sector expert, who was responsible for designing and establishing DPD's award winning urban logistics network in Central London.

SAFE AND EFFICIENT MOVEMENT OF GOODS AND SERVICES IS VITAL IN OUR EVERYDAY LIVES

Every item purchased from an online retailer or in store, fresh produce eaten in a restaurant, even the café chair that you sit on has been delivered by a commercial vehicle. The supply chain industry employs hundreds of thousands of people and contributes significantly to London's and the UK's economic success.

The importance of the movement of goods has never been more apparent than during the recent pandemic, where challenges in keeping supermarket shelves stocked and toilet roll in the nation's houses highlighted the need for resilient supply chains. As a result of the pandemic, there has been a significant shift in demand for the delivery of ecommerce products, and the supermarket home delivery market exploded; both trends which, although pre-existing COVID, are anticipated to continue growing beyond the economic recovery to come. Without the adequate provision of space to service the demands of the growing population, our cities won't cope, and this is exacerbated by vast amounts of industrial land lost each year to other uses.

£18bn

Value of Online
Grocery Retail in
2020

Source: AHDB

Regulations, restrictions and final mile delivery challenges are greatest in city centres where traffic is worst, parking hardest to find and accessing suitable warehousing highly challenging for freight operators. It is for these reasons that more centrally located City Depots are vital and will have the most positive contribution to the lives of city residents and businesses.

WHAT IS A CITY DEPOT?

- City Depots are small (up to around 2,000 m²) ultra-urban, final mile delivery depots, focused on delivery to the residents and businesses in the immediate local area, often using electric vehicles. These areas are currently served by out-of-town depots that send lots of diesel vehicles across the road network, contributing to congestion and pollution. City Depots are considerably smaller than traditional out of town B8 properties, handling less goods and with fewer vehicle movements.
- City Depots are very different to out-of-town delivery depots, they are much smaller, operating fewer and smaller vehicles, including electric vans and cargo bikes. The operating times are also different for these depots, as demonstrated by the delivery schedule example below.

WHO ARE THE OPERATORS?

A broad range of companies and sectors have an interest in City Depots and final mile delivery inside urban locations. Below is a selection of industry operations that would be potential occupiers of a site such as 3-6 Spring Place.

MAIL AND PARCELS	ONLINE GROCERY	FINAL MILE DELIVERY	RETAIL DELIVERY	PHARMACEUTICALS DELIVERY
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ULTRA-SUSTAINABLE AND WELL SPECIFIED WAREHOUSING

The perception of warehouses as undesirable, dirty and polluting manufacturing buildings is outdated. Construction standards have increased significantly, with a focus on building long-term sustainable buildings using modern methods of construction. SEGRO is working to a very high construction standard, creating a clean, sustainable environment for both employees and neighbouring residents that fits within the local environment.

- SEGRO'S Environmental Building Standards
- BREEAM 'EXCELLENT'
 - EPC 'A+'
 - Net Carbon Zero
 - Electric Vehicle Charging Enabled
 - Green Living Walls
 - Renewable Energy Generation

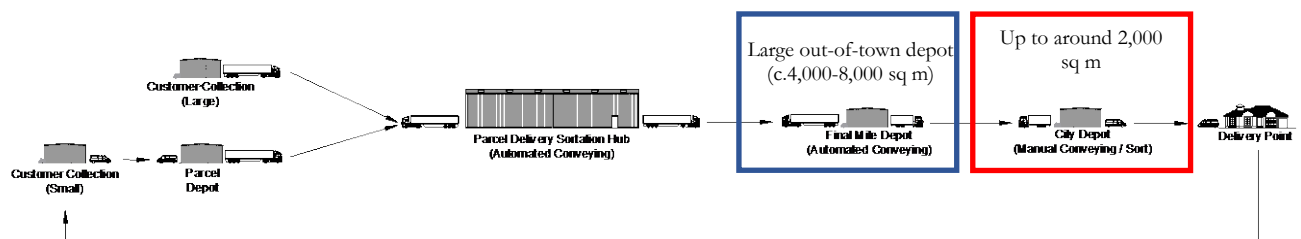
HOW DOES A CITY DEPOT WORK?

In traditional, larger final mile depots, goods are received from a company's centralised distribution centres. In contrast, a City Depot has its freight delivered by an intermediary depot, meaning that it's not serviced by large HGV's, only smaller rigid vehicles between 7.5tonnes and 18tonnes in payload size. By operating in this way, it consolidates many individual van movements into larger service vehicles before being sorted in the City Depot for final mile delivery by city appropriate vehicles.

The City Depot does not have capacity for many service vehicles to be accessing it throughout the day, and that is not how it is designed, constructed or intended. Where land is a premium in city locations, parking is an unnecessary cost, therefore, servicing vehicles deliver to site and then, once unloaded, leave quickly rather than staying on site.

EXAMPLE OPERATIONAL APPROACH OF A FINAL MILE PARCEL DELIVERY COMPANY

Below is an example of a parcel distribution network after integrating a City Depot. In a normal, out-of-town B8 facility, the final mile delivery is undertaken from the depot in the blue box. In contrast, the red box shows a final mile City Depot from which deliveries are made to the local area. The service vehicles take the parcels from the depot in the blue box to the City Depot and deliveries are fulfilled on smaller city appropriate vehicles, whereas, previously, the journeys into delivery areas and doorstep deliveries would have been completed by larger individual vans travelling longer distances to make their deliveries.



CITY DEPOT DAILY SCHEDULE

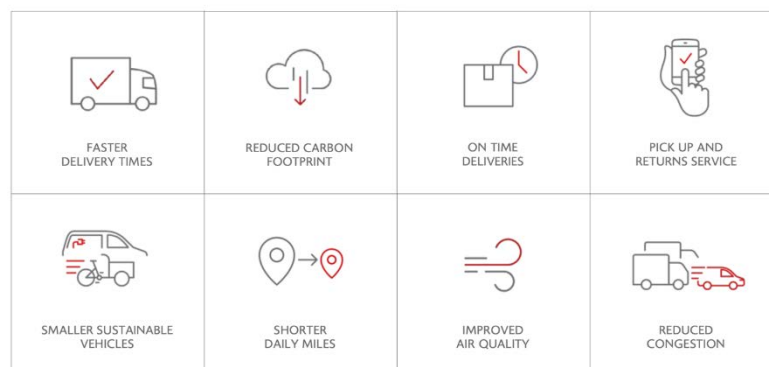
Every business operation differs slightly, but an indicative arrangement for a City Depot is below:

TIME	PROCESS	ON SITE ACTIVITY
19:00 – 05:00	Closed	Site is closed / very minimal activity. Electric vehicles are charged overnight.
07:00 – 09:00	Inbound	Inbound rigid servicing vehicles arrive and depart from the depot. These vehicles deliver goods that are then sorted for final mile delivery.
07:30 – 10:30	Loading	Staff arrive and load goods onto final mile vans or cargo bikes before departing for the day's deliveries.
10:30 – 16:00	Outbound	Very little activity on site as delivery vehicles are completing local deliveries throughout the day. Management remains on site to make sure deliveries are successful.
16:00 – 19:00	Return	Final mile vans and cargo bikes return over a longer period due to differences in delivery routes. Staff leave for the day.

THE IMPORTANCE TO LOGISTICS OPERATORS AND THE ENVIRONMENTAL BENEFITS

City Depots provide several benefits to local residents and businesses, the environment and logistics operators:

- Consumers seeking faster delivery – a City Depot located close to the final delivery point enables much faster and more efficient delivery of goods. With a small geographical area to cover it is much easier for the operator to be responsive and provide quicker delivery and better service levels.
- Reduction in the impact on major roads – previously, these delivery areas will have been served by a depot located a long way from the point of delivery. Often, many vehicles will be driving into the area, and these can be replaced by a small number of larger service vehicles leading to a reduction in overall miles driven and emissions generated.
- Electric vehicle deployment – by reducing the vehicle numbers driving into the area and by having a small geographic delivery area to service, it is much simpler for the operator to deploy electric vehicles for final mile activity. This leads to a major reduction in emissions in the local area. Electric vehicles are currently generally smaller than diesel vehicles so the overall impact on the road network is also reduced.
- Highly efficient operations – by reducing the number of miles driven by the operator, and the associated time saved when vehicles sit in traffic, it enables a highly efficient operation as driver productivity is so high.



HIGHLY EFFICIENT, TECHNOLOGY ENABLED, FINAL MILE OPERATIONS

The efficiency of the final mile is key for the occupier of a City Depot, therefore, a high level of control by the management team is a key target. The size and location of a City Depot means that the goods being delivered into the building are carefully controlled to ensure the size of goods, and delivery areas are adhered to. These smaller sites lead to a much closer relationship between the management team and drivers which ensures that compliance to all requirements can be both monitored and enforced as required.

Operators use a range of software that optimises routing in the final mile, notifying recipients of goods in transit and giving them the opportunity to reroute and control deliveries to ensure first time delivery. Overnight, the delivery volumes can be communicated to the depot so they can carefully plan the next operational day. The operations follow a consistent pattern, so vehicle arrivals are particularly well controlled and regularised. As a result, vehicles have an arrival schedule that they work to so the site can operate free from congestion, limiting the depot’s capacity. ‘Delivery and Servicing Management Plans’ are now commonplace, and operators are used to adhering to these and ensuring compliance and reporting as part of the planning process.

TYPICAL CITY DEPOT VEHICLES

A City Depot allows for a range of vehicles to be operated during the final mile delivery process, including electric vehicles, smaller vans, and cargo bikes. These smaller vehicles are highly efficient when delivering to areas with a high number of residential properties as the size of goods tends to be smaller and the vehicle load space is highly utilised.



SERVICING VEHICLE
7.5 - 18 tonnes



LARGER VAN



CAR-DERIVED VAN



CARGO BIKE



Scale of graphic illustrations representative only

WORKING WITH THE COMMUNITY TO ENSURE A B8 OPERATION IS WELL MANAGED AND APPROPRIATELY CONTROLLED

SEGRO is a long-term owner and seeks to build relationships with residents, local businesses and the local community. Therefore, it works with all stakeholders to design buildings and control occupier operations to ensure a harmonious environment for all. SEGRO has sought to agree the following restrictions within a framework ‘Delivery Servicing and Management Plan’ to ensure the servicing of the building is appropriately controlled:

<p>Restrictions on the size of vehicles delivering to the depot</p>	<p>Cap on the number of servicing vehicles delivering to the depot</p>	<p>Routing strategy for service vehicles and final mile vans</p>	<p>Restriction to internal loading arrangement</p>
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<p>Keeping the doors shut when vehicles are not driving through</p>	<p>Delivery and Servicing Management Plan approved by the local authority</p>	<p>Residents’ council, operator and SEGRO represented</p>	<p>No use of radios within the depot and the use of horns to safety critical use only</p>
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3-6 SPRING PLACE DESIGN AND SUITABILITY FOR A B8 LAST MILE USE

3-6 Spring Place is an existing industrial unit which, operationally, would be suitable for B1(c), B2 or B8 uses. SEGRO has prepared detailed layouts in addition to animation and time-lapse modelling (see video submissions) to demonstrate how a B8 last mile operation would take place internally on site. SEGRO’s refurbishment proposals include the consolidation of four existing loading doors to three widened doors. The layout and capacity allow an occupier to park around 28 small commercial vehicles within the warehouse, and the ability to unload up to 18tonne vehicles internally off the highway with the doors shut.



The building has been designed to allow for multiple operational approaches depending on the individual occupants in the future. By designing with flexibility built in, SEGRO has enabled a site that can be operated in multiple ways, allowing for more flexibility and operational efficiency than a set operating procedure. The design has made the most of the limited space and arches within the property whilst presenting a high-quality external finish. This flexibility of design is highly attractive because few operational concessions must be made by the occupiers, and with the lack of B8 properties near the centre of London, operators will make this space work as efficiently as possible because of the operational benefits they can achieve.



CASE STUDY – DPD WESTMINSTER

DPD Westminster City Depot opened in 2019, changing the parcel giant’s final mile delivery activity in SW1 by moving the delivery depot from its 60,000 sq ft depot in Southwark to a redeveloped 5,000 sq ft City Depot in Westminster, in the middle of its SW1 delivery area. DPD use electric 7.5tonne service vehicles to bring parcels to the depot, before being delivered exclusively by small electric final mile vans, electric quadricycles and cargo.

The results of the operational change are superb - a reduction in miles driven per parcel of 49%, a zero-emission operation using smaller electric vehicles for both trunking and final mile, and the avoidance of 180 miles of wasted driving time and pollution per day.

ITEM	BEFORE CITY LOGISTICS	CITY LOGISTICS OPERATING MODEL
Delivery depot	DPD London City - Southwark	DPD Westminster
Delivery postcode area	SW1	SW1
Diesel vans	15	0
Electric vans	0	22
Unproductive miles per day	180	0
Grams of CO2 per parcel delivered	113.94	0
Miles driven per parcel delivered	0.203	0.103 (49% reduction)
Image		

CONCLUSION

The purpose of this document is to help explain how a B8 final mile delivery operator would work when in occupation of the site located at 3-6 Spring Place, and to share the benefits to residents, the environment and operators through a highly efficient, sustainable and lighter commercial operation. City Depots facilitate a forward thinking, well managed and highly efficient operation that leads to lower mileage, cleaner vehicles, and contributions to reducing congestion and carbon emissions, ultimately, for the benefit of residents and businesses in the local area. This cleaner operation is highly productive and serves the needs of modern society, which continues to purchase more goods and services online and through ecommerce platforms.

The sites arrangement at 3-6 Spring Place allows for an effective internal loading operation, in a secure area, where the impact on local residents can be reduced by operating with the warehouse doors shut. The small site size also leads to minimal impact on the local road network and contributes to a wider network reduction in congestion and emissions. In conclusion, 3-6 Spring Place is highly suitable for an efficient and sustainable final mile delivery depot, carefully designed to integrate final mile logistics within the local environment that it serves.