Allied London

Manchester House

Waste and Servicing

PLANNING AND
BUILDING CONTROL
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Allied London

Manchester House

Waste and Servicing

June 2010

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Contents

		Page
1	Introduction	1
2	Existing and Proposed Areas	1
3	Servicing Strategy	1
	3.1 Existing Building	2
	3.2 Proposed Re-development	3
4	Waste	6
5	Summary	9

Tables

Table 1: Area Schedules
Table 2: Vehicle Generation Figures
Table 3: Vehicle Arrivals
Table 4: Vehicle Arrivals
Table 5: Waste Generation
Table 6: Storage Requirements

Figures

Figure 1: Existing Usage
Figure 2: Basement Layout
Figure 3: Proposed Development
Figure 4: Indicative Waste Room Layout
Figure 5: Powered Trolley *Available at* http://www.epowertrucks.co.uk

1 Introduction

This report details the proposed waste and servicing strategy for Manchester House, an existing building within the Spinningfields development, designated Plot 108 in the masterplan. It is proposed to redevelop the plot to include a new internal retail street that will contain various A1/2/3/4 retail outlets and new office entrances.

As the building is at present unoccupied, this report gives estimated figures for both the existing and proposed usage of this plot based on Arup surveys and industry standard data.

The report then develops figures for the change of use proposed for the plot to identify the expected differences and to show that the development can be serviced with out detriment to other developments in the area.

2 Existing and Proposed Areas

The area schedules as supplied by Sheppard Robson are as shown below in Table 1

	Existing		Proposed	
	Total GIA (m^2)	Lettable GIA (m^2)	Total GIA (m^2)	Lettable GIA (m^2)
Office	7619	4945	7707	5277
Retail	214 (A1) 549 (A3/4)	205 (A1) 488 (A3/4)	946	890

Table 1: Area Schedules

3 Servicing Strategy

The service vehicle (delivery and maintenance vehicle) generation rates used in this document are based on survey information from comparable previous buildings and are as shown below in Table 2:

Vehicle Generation Rates	
Usage	**Vehicles per 100m²**
Office	0.2
Office Couriers	0.07
Bar/Restaurant	1.5
Retail	0.53

Table 2: Vehicle Generation Figures

3.1 Existing Building

3.1.1 Present Loading bay

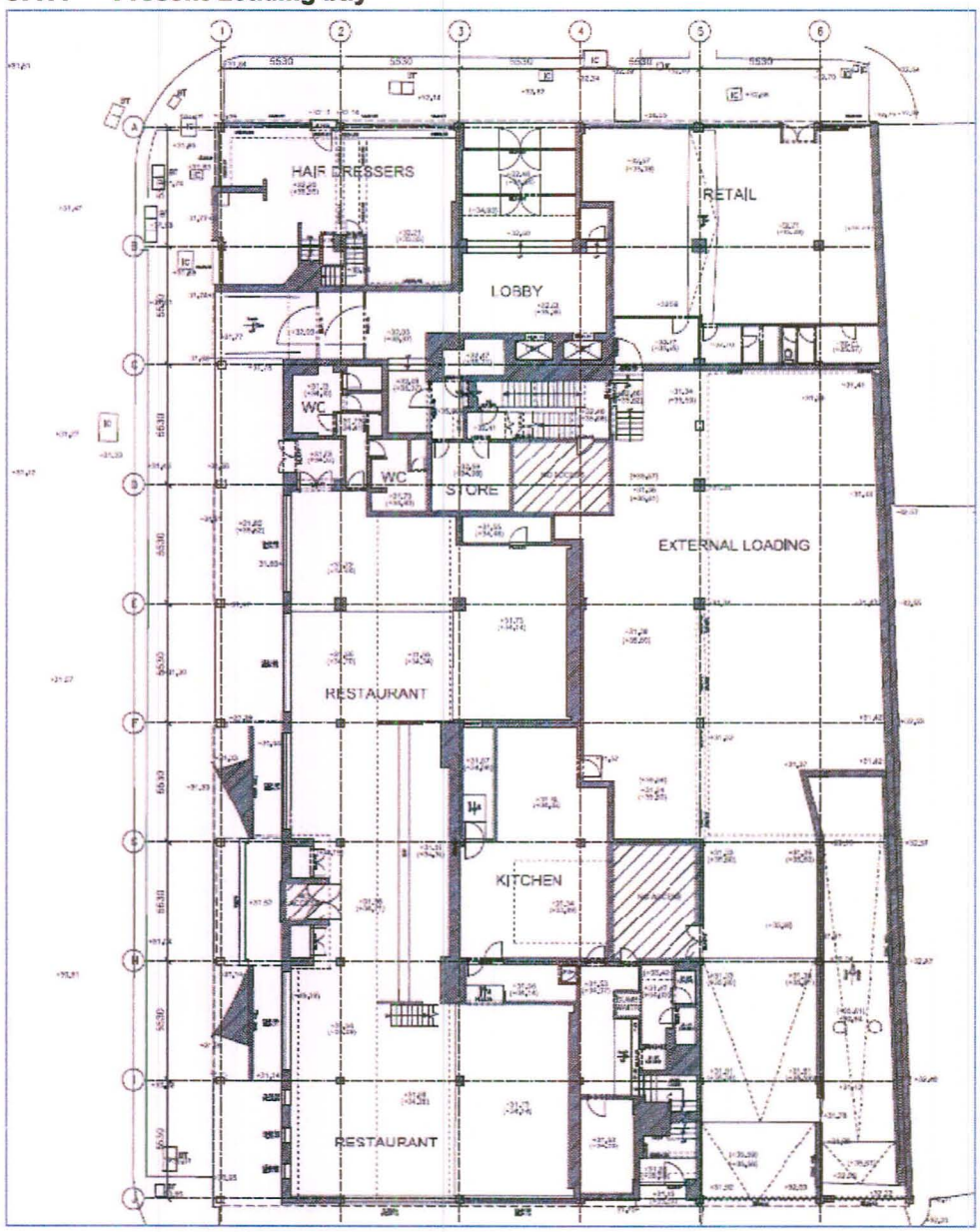


Figure 1: Existing Usage

The existing building is designed to be serviced from the external loading space shown to the right of the drawing above (Figure 1). This is accessed from the two way section of Wood Street.

3.1.2 Vehicle Arrivals

Using the generation figures and area schedules given in Section 2 the following number of vehicles would have been expected to service the building per day as it is currently configured.

Vehicle Type						
16.5m	10m	8m	6m	Long-term	Office Couriers	Total
0	3	6	13	2	5	**29**

Table 3: Vehicle Arrivals

From previous surveys it is estimated that around 3 of these vehicles (excluding couriers) would arrive in the peak hour (between 08:00 and 09:00).

The majority of these vehicles would be 6m Transit or Sprinter type vans with only the occasional larger vehicle delivering as part of a multi-drop round.

3.2 Proposed Re-development

3.2.1 Vehicle Arrivals

Using the generation figures and area schedules given in Section 2 the following number of vehicles will be expected to service the building after the redevelopment has taken place.

Vehicle Type						
16.5m	10m	8m	6m	Long-term	Office Couriers	Total
0	3	6	13	2	5	**29**

Table 4: Vehicle Arrivals

From previous surveys it is estimated that around 3 of these vehicles (excluding couriers) would arrive in the peak hour (between 09:00 and 10:00).

The majority of these vehicles would be 6m Transit or Sprinter type vans with only the occasional larger vehicle delivering as part of a multi-drop round.

The long term vehicles are vehicles that will be there to perform service functions at the various office and retail sections of the development. These can easily be arranged to arrive outside of any peak hour as they are usually a booked service.

3.2.2 Proposed Servicing Facilities

The largest retail tenant at this development is likely to account for around 40% of the total retail within the development.

Deliveries to this larger unit will be made in vehicles up to 10m in length which will be accommodated within the proposed loading bay on Dolefield (see Figure 3). Goods will be taken from the loading bay to the unit using their front door.

In order to accommodate this loading bay it is proposed to relocate the four existing pay and display bays in this location elsewhere on the Spinningfields site. Final locations will be formally agreed with the City Council. The disabled parking bays opposite the court entrance will be unaffected.

The other sections of retail and the office sections of the development will predominantly use the basement loading area.

This basement loading area (see Figure 2) will be limited to deliveries by a 6m Sprinter or Transit type vehicle or smaller. The entrance will be fitted with a height detection or warning device to prevent over height vehicles trying to enter. Up to two vehicles can be accommodated in the basement loading bay at any one time; one unloading and the other

waiting to enter the bay. A goods lift will be provided to allow goods to be taken to ground floor level for delivery to the retail outlets.

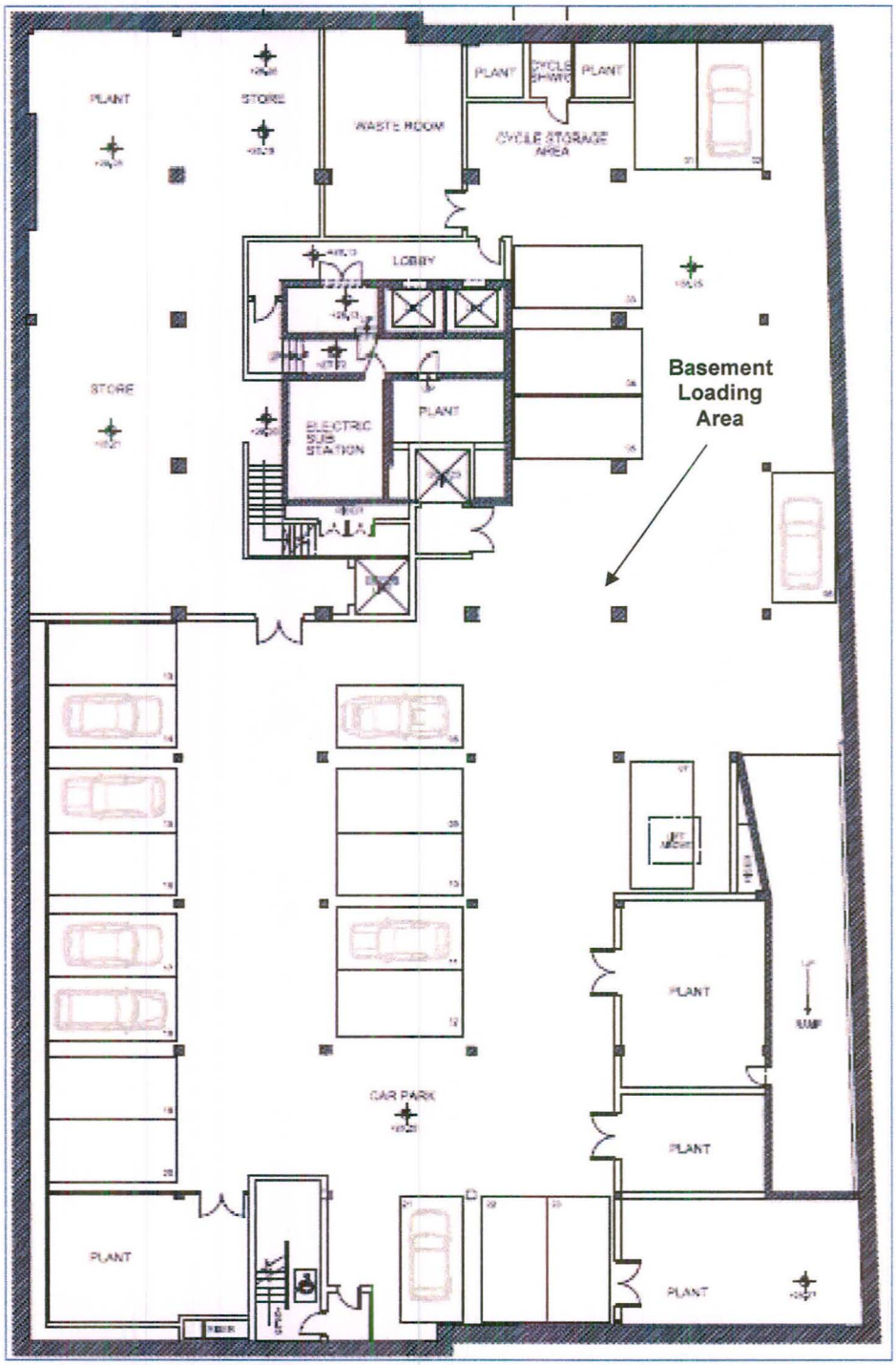


Figure 2: Basement Layout

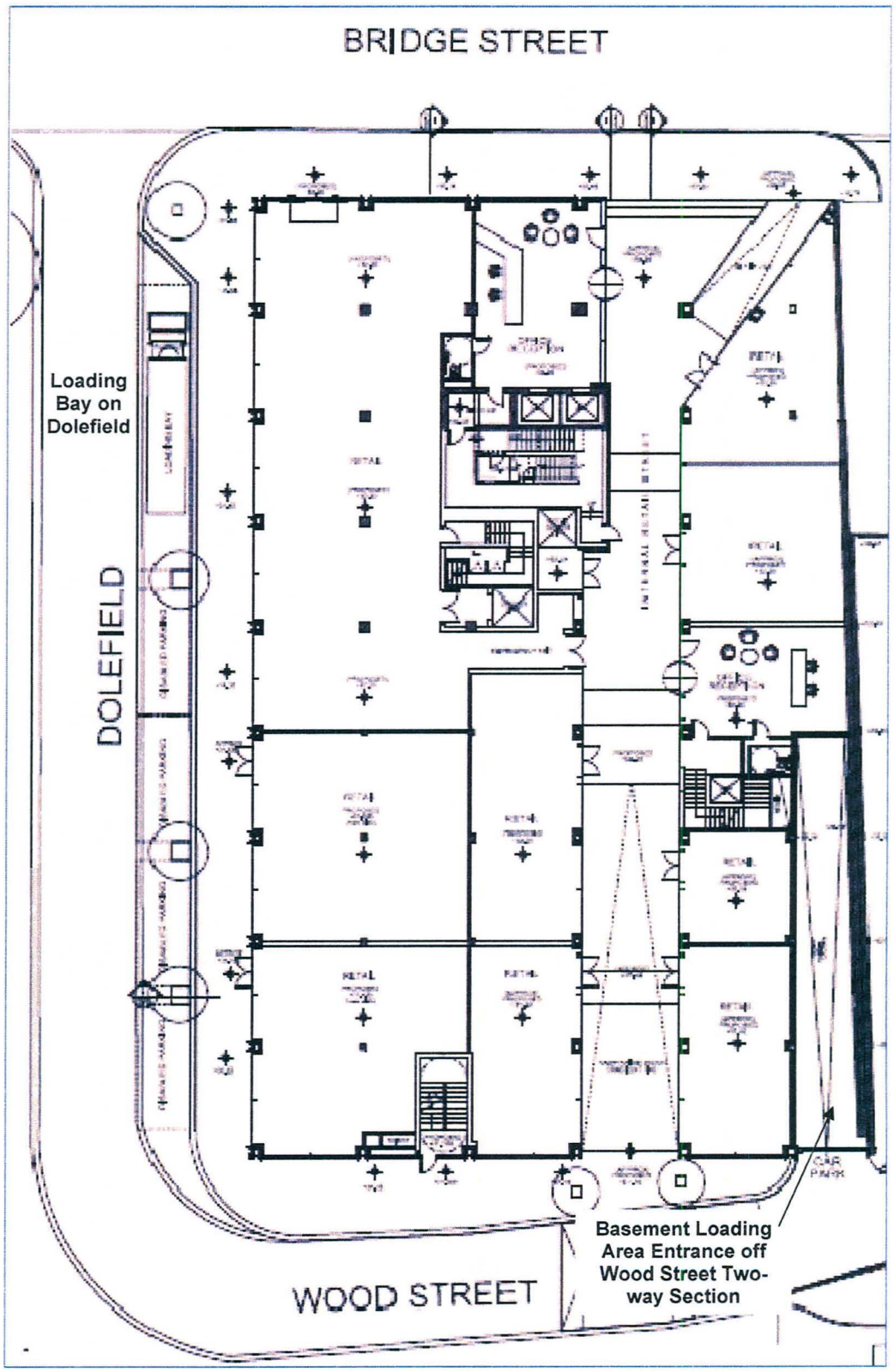


Figure 3: Proposed Development

4 Waste

The Manchester House development falls within the City of Manchester and therefore is subject to their waste requirements and BS5906:2005 storage and on-site treatment of solid waste from buildings.

The proposals for this development comply with the requirements given in BS5906:2005 and The City of Manchester Council Sustainable Design and Construction Guidance are summarised below:

- Any route where wheeled bins are to be pushed will have a gradient less than 1:12, and include no steps or kerbs (in this case, where gradients on the existing car park ramp are in excess of 1:12 an electric tug will be used to move bins)
- The collection vehicle will be able to approach to within a maximum distance of 8m of the collection point (eg. top of car park ramp or other suitable location)
- No steps and projections at the entrance of waste rooms
- Storage areas for waste and recyclable material will be clearly designated for this use only, by a suitable door or wall sign and, where appropriate, with floor markings
- The walls and roofs of the waste room will be formed of non-combustible and impervious material and have a fire resistance one hour and the door 30 minutes
- Waste rooms will have proper ventilation and wash down facilities (water pipe and drainage)
- A walkway at least 1.3m wide will be provided within the waste room that allows access to each of the individual containers and ensures that an individual container can be removed from the store without the need to move any other containers
- Doorways will provide at least 1.3m clearance (including thickness of doors)
- Gullies will be positioned as not to be in the track of container trolley wheels
- Headroom in the waste rooms will be a minimum of 2.6m clear
- Medium to large restaurants will include suitable separate storage provision for waste cooking oil

The waste contractor will be instructed to collect from this particular development outside of normal working hours.

Waste generation calculations for a development of this size based on BS guidelines result in the figures in tables 5 and 6. Although it is proposed that waste will be collected on a daily basis, sufficient storage will be provided for two days waste generation to allow for collection interruptions due to holidays or vehicle breakdown or peaks in generation.

Type	Estimated Waste Generation in 2 day period (m^3)
All non-recoverable	5.99
Paper	4.52
Plastics	0.65
Packaging (cardboard)	1.96
Aluminium	0.18
Glass	0.26
Steel	0.00
Subtotal Recoverable	7.58
Total Waste	**13.57**

Table 5: Waste Generation

Non-recoverable Containers	
Eurocart (Standard)	6
Recoverable Containers	
Wheelie Bin	0
Wheelie Bin (Large)	0
Eurocart (Small)	0
Eurocart (Standard)	6
Eurocart (Large)	0
Europress	0
Bale	0
Compactor	0
Other	0

Table 6: Storage Requirements

The requirements shown in the table above result in a waste room of a minimum of 3.8m by 9m with a minimum height of 2.6m (see Figure. 4). The waste room will conform to the guidelines shown in BS5906 (2005) and will be accommodated at basement level.

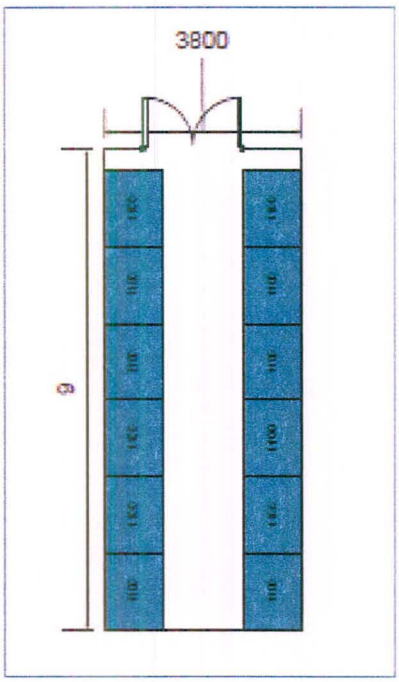


Figure 4: Indicative Waste Room Layout

Tenants will bring their waste down to the storage area and place the waste in the appropriate bin. Collections will be made by the estate's waste contractor on a daily basis. However two days storage has been provided to allow for disruptions to the waste collection service or peaks in waste generation.

The refuse collection vehicle will park on Wood Street and the waste will be brought up to the collection point by means of a powered trolley similar to the one shown below (Figure 5).



Figure 5: Powered Trolley *Available at* http://www.epowertrucks.co.uk

With a towing capacity of 1.5t a trolley such as this will be able to bring two or three bins at a time up to the collection point. A version with a three tonne towing capacity is also available. This operation will be performed outside of normal working hours.

5 Summary

The redevelopment of this plot will have a neutral effect on the existing traffic in the area. The waste strategy will be incorporated into the estate management regime in order to ensure that the development operates as indicated above. The loading bay on Dolefield will provide a significant enhancement to the delivery and servicing capabilities available in the existing building.