Subject	101 Camley Street, Camden, Minor Material Amendment Transport and Logistics Note
Date	16 November 2016
Job No/Ref	236388-08

101 Camley Street, Camden, Minor Material Amendment Transport and Logistics Note

1 Introduction

Arup has been commissioned by Chalk Farm Developments Ltd. to provide a transport and logistics note in support of a Minor Material Amendment application related to the proposed 101 Camley Street development.

Planning permission for the 101 Camley Street development was obtained in March 2015 (planning reference number 2014/4385/P). The consented mixed use development sits adjacent to the King's Cross Masterplan area and comprises 121 apartments, 2,104m^2 GIA of flexible commercial space, a new canal footbridge and a range of public and residents' landscaped amenity areas.

Following planning consent and a new purchaser of the site, a review of the scheme has been undertaken and a Minor Material Amendment (MMA) to the planning consent is being sought. The proposed changes were discussed at a meeting with London Borough of Camden (LBC) on 10 November 2016.

The amendments seek to increase the efficiency of the consented scheme. These include replacing the proposed basement access ramp by a vehicle lift and relocating refuse storage and cycle storage to the basement. A dedicated cycle lift and a refuse access lift have been provided to access these new locations. An increase of the proposed B1 office space (1,122m^2 GEA) is also proposed as part of the MMA application.

2 Design Proposals

The key transport related amendments to the design of the proposed scheme are:

- The removal of car park ramp to the basement and the replacement with a car lift;
- The relocation of cycle parking to basement and the associated provision of a dedicated cycle lift;
- The relocation of refuse stores to basement and the provision of a goods lift; and
- An increase of 1,122m^2 to 3,342m^2 of the proposed B1 office GEA.

The provision of lifts, rather than a ramp, providing direct access from lower ground floor to the different components of the scheme is considered to be an improvement with regards to access for deliveries and services.

The overall GEA of the proposed development remains the same (20,195m^2). However there is a change to the split of GEA between the C3 Residential and B1 Office land uses. The proposed B1 office Gross Internal Area (GIA) increase is due to the vehicle ramp omission. The allocation of GEA and GIA to each use within the development has changed as a result of the amendments to the

lower levels, where residential ancillary and basement area has been reapportioned to office use. The total number of proposed residential units, 121, remains the same as the consented scheme.

The total GEA for the proposed development is 20,195m^2 (same as consented scheme), which is split as follows:

- 16,853m^2 (reduction of 1,122m^2) C3 Residential, with total number of units remaining the same (121); and
- 3,342m^2 (increase of 1,122m^2) B1 Office.

3 Trip Generation

The trip generation for the consented scheme as identified in the Transport Assessment (TA) for the previous development (produced by TTP Consulting in June 2014) is shown in **Table 1**.

Table 1: Consented Trip Generation

Mode	AM (08:00-09:00)		PM (17:00-18:00)		Daily	
	In	Out	In	Out	In	Out
Car Driver	1	2	3	3	28	27
Car Passenger	0	0	1	1	8	8
Taxi	0	0	1	1	8	8
Motorcycle	0	0	1	1	8	8
Bus	13	17	29	29	276	267
Tube	5	6	9	15	119	115
Rail	4	3	2	12	84	81
Walking	13	14	22	34	284	275
Cycling	1	2	3	3	26	25
Total	39	44	70	99	843	817

Source: Table 6.1 of 101 Camley Street, Camden TA Report, TPP Consulting, June 2014

The forecast increase in trip generation using the same trip rates agreed in the consented scheme based on the 1,122m^2 increase in the B1 Office GEA is shown in **Table 2**.

Table 2: Additional Trip Generation (MMA proposals)

Mode	AM (08:00-09:00)		PM (17:00-18:00)		Daily	
	In	Out	In	Out	In	Out
Car Driver	0	0	0	0	3	3
Car Passenger	0	0	0	0	1	1
Taxi	0	0	0	0	1	1
Motorcycle	0	0	0	0	1	1
Bus	2	0	0	2	13	12
Tube	4	0	0	4	26	26
Rail	6	1	1	6	40	39
Walking	8	1	1	8	54	53
Cycling	0	0	0	0	1	1
Total	20	3	3	21	142	137

** Figures in the table above are subject to rounding*

It is evident that the resulting increase in car trips is negligible. Additionally, based on the very good public transport provision in the area (Public Transport Accessibility Level 5) it is considered that the additional public transport trips can be accommodated on the local networks.

4 Parking

The TA for the consented scheme identified that the site is located in an area of excellent public transport accessibility and within close proximity to a number of car clubs and therefore does not propose the provision of car parking spaces within the site. The 13 disabled parking spaces agreed for the consented scheme, are proposed to be retained in the basement. It is considered that the consented number of disabled parking spaces is adequate for the proposed increase in B1 Office land use area.

The consented scheme provided 248 long-stay cycle parking spaces in the form of Josta 2-tier stands, located at lower ground floor level. The consented scheme TA also identified 12 cycle parking spaces for visitor use. Due to the increase in the proposed B1 Office GEA (1,122m^2), an additional 13 long-stay and 3 short-stay additional cycle parking spaces are required. This MMA application therefore proposes the provision of a total of 278 long-stay cycle parking spaces, in compliance with the London Plan standards.

The majority of the proposed long-stay cycle parking spaces will be relocated from the lower ground floor to the basement. A dedicated cycle lift, accessed from Granary Street, has been provided to access the basement from street level.

It is proposed that 16 visitor cycle parking spaces are provided to accommodate short stay cycle parking. Eight “Sheffield” or “CaMden” type stands will be provided within the curtilage of the proposed development to accommodate short-stay visitor cycle parking. Each of these cycle stands has the capacity to accommodate two bicycles and will be placed 1m apart.

5 Delivery and Servicing Strategy

The servicing strategy for the consented scheme enabled small to medium sized vehicle (e.g. transit vans) to service the site via the basement with deliveries by larger vehicles taking place on-street on Granary Street.

The proposed scheme will not alter this arrangement, the only difference is that rather than accessing the basement via a ramp, small to medium sized vehicles will be able to access the basement via the vehicle lift provided.

Swept path analysis of the revised basement layout is provided in the attached drawing (**Appendix A**, Drawing 236388-08-001). The MMA scheme swept path analysis demonstrates that a transit van can use the lift and manoeuvre within the basement to exit in forward gear. The van also utilises a dedicated area adjacent to the employment drop off area. A stop line is indicated on the plan to prevent conflicting vehicle movements between a vehicle exiting the car lift into the basement and a vehicle waiting to use the car lift exiting the basement. A traffic light system will be employed to indicate to the waiting vehicle when the vehicle lift is available to exit. At street level the vehicle lift is set back to enable a vehicle to wait off the highway whilst waiting to access the lift.

The quantum of servicing trips is as forecast in the consented TA (15 – 17 deliveries per day) and it is expected that the majority of the daily trips will be undertaken by smaller size vehicles, using the proposed basement area and car lift. The occasional delivery by larger goods vehicle will take place on Granary Street. Granary Street is a wide and lightly trafficked route with single yellow line markings and it is not anticipated that the occasional delivery will have a material impact on the operation of Granary Street.

6 Waste Storage and Operations Review

The proposed waste storage for this MMA application has been reviewed to confirm that the waste storage provided is adequate for the building use.

The following information on the proposed scheme has been provided:

- Total office (B1) Gross Internal Area: 3,090m^2
- Total residential (C3) Gross Internal Area: 15,513m^2
- Total number of private units: 91
- Total number of Shared Ownership and Affordable rented units: 30

This review for 101 Camley Street has been conducted in reference to the following documents:

- BS 5906:2005 Waste Management in Buildings - Code of Practice; and
- Camden Planning Guidance, 2015 CPG1.

6.1 Assumptions

- All waste containers will be accessible to the waste contractor and located within 10m of a suitable place to stop for collection;

- A minimum clear space of 150mm will be allowed between each container;
- If the storage area is raised above the area where the collection vehicle parks, then a dropped kerb is required to safely move the bin to the level of the collection vehicle;
- The roadway the vehicle parks on will be able to accommodate the size and weight of a 26 tonne vehicle; and
- Food waste will be collected for the residential blocks.

6.2 Waste Generation

6.2.1 Office (B1) Waste

Waste calculated using BS 5906:2005 methodology:

- Based on one employee per 6m^2 Net Internal Area;
- 20% of waste is residual waste;
- 80% of waste is mixed dry recycling; and
- It is assumed that there is no putrescible/organic waste.

The estimated two day waste generation for the B1 office space is presented in **Table 3**.

Table 3: Waste generated by office (B1) in two days

Waste Type	Waste Volume (m^3)
Residual	1.76
Recycling	7.00
Total	**8.76**

6.2.2 Residential (C3) Waste

Waste arising calculated using the London Borough of Camden (LBC) Planning Guidance (**Table 4**) and methodology, which calculated a volume for one week's waste:

- 50% of waste is residual waste;
- 40% of waste is mixed dry recycling;
- 10% of waste is food waste; and
- LBC specifies that waste storage areas should provide eight days' waste storage for residential tenants.

Table 4: London Borough of Camden projected weekly waste per household

Size of household	Projected weekly waste arising (litres)
Studio/one bed	100
Two bed	170
Three bed	240
Penthouse/4 bed	310

The estimated waste generation for eight days' waste storage for the C3 residential space is presented in **Table 5**.

Table 5: Waste generated by residential (C3) in eight days

Waste Type	Waste Volume (m^2)
Residual	12.51
Recycling	10.01
Food	2.50
Total	**25.03**

6.3 Waste Storage

6.3.1 Waste Storage Calculations

Office (B1) Waste

The total estimated waste generation for two days based on B1 usage is 8.76m^3. The total storage requirement is presented in **Table 6**.

Table 6: Two day waste storage requirements for office (B1)

	GIA (m^2)	**Two Daily Waste (m^3)**	No. 1,100 bins residual waste	No. 1,100 bins mixed dry recycling
Office (B1) Waste	3,090	**8.76**	**2**	**9**
Total				

Residential (C3) Waste

The total estimated waste generation for eight days based on C3 usage is 25.03m^3. The total storage requirement is presented in **Table 7**.

Table 7: Eight day waste storage requirements for residential (C3)

	GIA (m^2)	Seven Daily Waste (m^3)	Eight Daily Waste (m^3)	No. 1,100 bins residual waste	No. 1,100 bins mixed dry recycling	No. 500 food waste bins
Private Residential (C3) Waste	15,512	16.24	18.56	9	7	4
Affordable/Shared Ownership Residential (C3) Waste		5.66	6.15	3	3	2
Total		**21.90**	**25.03**	**12**	**10**	**6**

6.3.2 Proposed Waste Storage Strategy

Office (B1) Waste

Based on the MMA scheme proposals, the development will provide:

- Ten No. 1,100 litre bins for mixed dry recyclables and residual waste.

This storage provision will provide 90% of the two day storage requirements for the B1 waste generation.

Residential (C3) Waste

The MMA scheme proposals provide:

- Six No. 1,100 litre bins for Shared Ownership/Affordable accommodation;
- Twenty No. 1,100 litre bins for Private accommodation; and

This storage provision will be sufficient for eight days' storage. Camden residential collections take place on a weekly basis at lease; however an extra day's provision is required to account for bank holidays or missed collections. The collection schedule will be organised by LBC's waste Environmental Services team.

The MMA application also proposes the provision of six No. 500 litre food waste containers.

6.3.3 Vertical Transportation

- Both the goods lift and the car lift will be suitable to transport containers from the respective stores to ground level as they are both assumed to be large enough to accommodate a person as well as at least one container;
- Container rotation on collection day will be managed by facilities management (FM) team to bring full bins to ground level and empty bins back to basement level. No waste containers will be stored on the public highway for prolonged periods of time; and
- A dropped kerb will be provided, subject to agreement with LBC, to safely move the bins to the level of the collection vehicle from the pavement.

6.4 Summary

6.4.1 Office (B1) Waste

Based on a collection every two days for commercial waste the proposed waste store of ten No. 1,100 litre bins for mixed dry recyclables and residual waste will be sufficient for the proposed development.

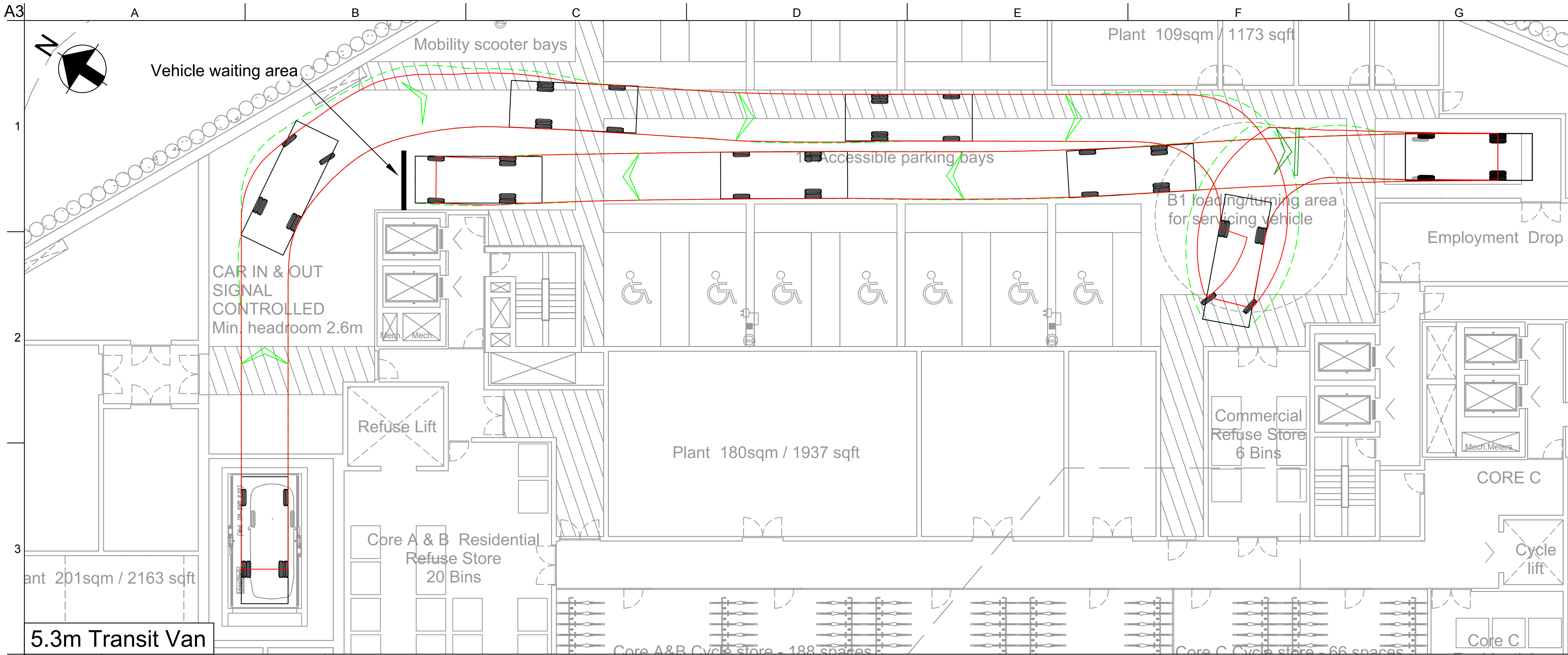
6.4.2 Residential (C3) Waste

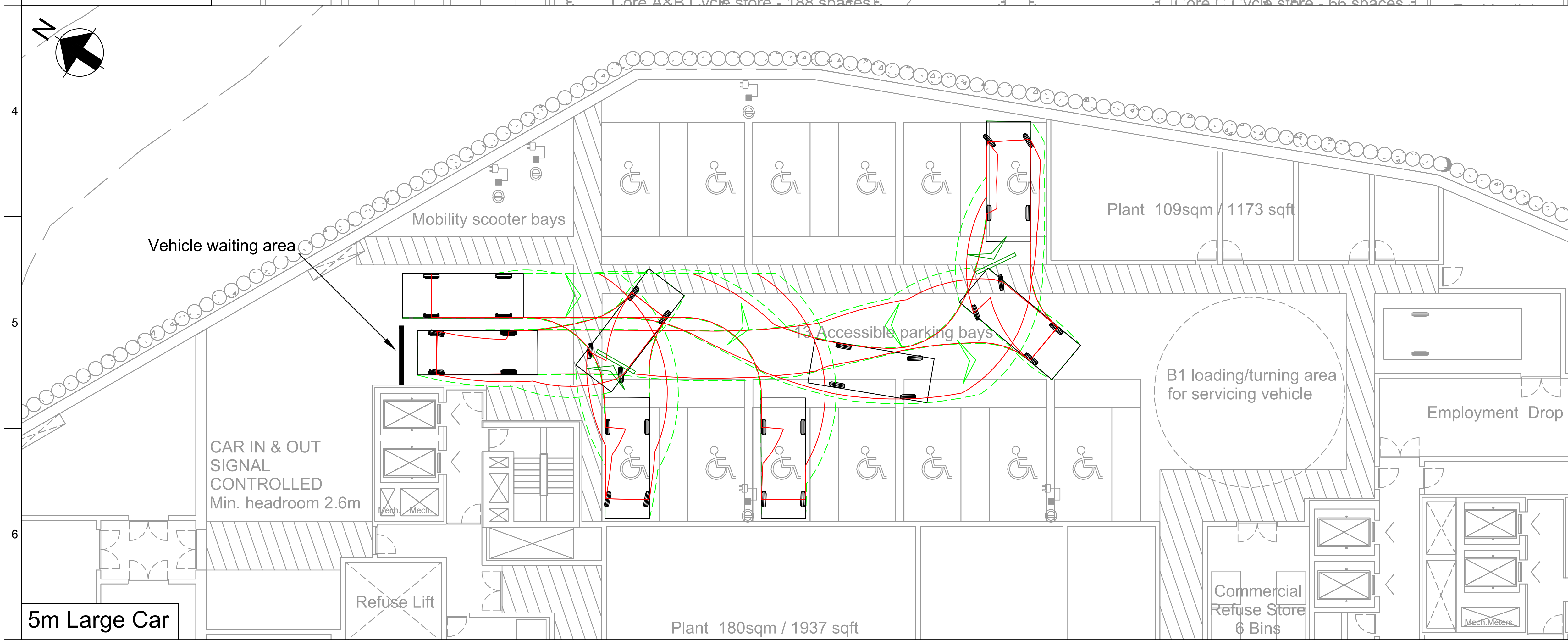
Based on a weekly collection of residential waste (with a day's additional storage available to account for missed collections or bank holidays), the current provision of 26 No. 1,100 litre containers will be sufficient for the recycling and refuse capacities respectively. The proposed provision of six No. 500 litre containers for food waste is considered sufficient to contain the food waste generated each week.

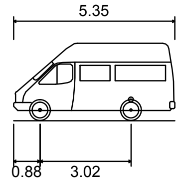
Appendix A

Swept Path Analysis - MMA Scheme

A3

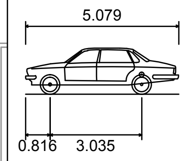






3.5t Ford Transit Van

Overall Length	5.350m
Overall Width	1.970m
Overall Body Height	2.562m
Min Body Ground Clearance	0.335m
Track Width	1.970m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	5.850m



Large Car (2006)

Overall Length	5.079m
Overall Width	1.872m
Overall Body Height	1.525m
Min Body Ground Clearance	0.310m
Max Track Width	1.831m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	5.900m

Issue	Date	By	Chkd	Appd
I2	15/11/16	ALH	NH	MR
	Drawing base updated			
I1	26/10/16	ALH	NH	MR
	Issued for Information			

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Client
Chalk Farm Developments Ltd

Job Title
101 Camley Street

Drawing Title
Basement Level
MMA Scheme
Swept Path Analysis
Ford Transit & Large Car

Scale at A3: 1:200

Discipline: Transport

Drawing Status: **Information**

Job No: **236388-08**

Issue: **I2**

Drawing No: **236388-08-SK001**

Do not scale

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