79 CAMDEN ROAD
& 86-100 ST PANCRAS WAY

waste & recycling strategy

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by URS

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EXECUTIVE SUMMARY

This Waste and Recycling Strategy (hereafter referred to as the 'Strategy') has been prepared by URS Infrastructure and Environment UK Limited (URS) on behalf of Barratt West London (hereafter referred to as the 'Applicant') in support of the proposed 79 Camden Road development (hereafter referred to as the 'Proposed Development'. This Strategy forms part of the detailed planning application submission and has been prepared with reference to all other planning application material.

The Proposed Development will provide a residential scheme totalling approximately 15,566 square metres (m^2) Gross Internal Area (GIA). In total, 166 residential units will be provided by the Proposed Development; these units will be divided between six blocks comprising a mixture of one to four bedroom flats. The 166 residential units will include provision for social rented, intermediate and private housing. The Proposed Development aims to be sustainable with high standards of environmental performance. As such, due consideration has and will continue to be given to waste generated by the Proposed Development during its operation. Waste management within the Proposed Development has the following aims:

- To contribute towards achieving current and long-term government, Greater London Authority (GLA), North London Waste Authority (NLWA) and London Borough of Camden (LBC) targets for waste minimisation, recycling and reuse;
- To ensure that all legal requirements for handling and management of waste during the operational phase of the Proposed Development are complied with; and
- To provide tenants with convenient, clean and efficient waste management systems that enhance the operation of the buildings and promote high levels of recycling.

It is anticipated that waste generated by the demolition and construction phase of the Proposed Development will be addressed through a separate Site Waste Management Plan (SWMP). The SWMP will be the responsibility of the appointed contractor to ensure that appropriate waste management measures are adopted during this phase of the Proposed Development, so as to comply with relevant legislation and policy (i.e. the SWMP Regulations 2008 (Ref. 1)).

Once complete and operational the Proposed Development is anticipated to produce approximately 31,700L of waste per week (4,528L per day). Of this total, 15,848L will comprise mixed dry recyclables, 3,962L will be formed of organic food waste with the remaining 11,886L expected to be residual waste. Both mixed dry recyclables and residual waste will be stored in 1,100L Euro bins; organic food waste will be stored in 500L Euro bins. All waste streams will be provided with sufficient capacity for eight days' worth of waste generation. Mixed dry recyclables and residual waste will be collected on a weekly basis by LBC operatives; food waste will undergo twice weekly collection. All waste will be stored at the ground floor level with the internal management team on hand to ease collection on collection days.

These provisions will ensure that waste produced by the complete and operational development will be handled in accordance with The Environmental Protection (Duty of Care) (England) (Amendment) Regulations 2003 (Ref. 2) at all times. All waste infrastructure introduced to the Proposed Development will comply with Building Regulations Part H6 (Ref. 3), British Standard BS5906: 2005 (Ref. 4) and the Charted Institute of Building Services Engineers (CIBSE) Guide G (Ref. 5).

1. INTRODUCTION

URS Infrastructure & Environment UK Limited (URS) have been appointed by Barratt West London (hereafter referred to as the 'Applicant') to prepare a Waste and Recycling Strategy (hereafter referred to as the 'Strategy') in support of the proposed 79 Camden Road development (hereafter referred to as the 'Proposed Development').

The principal aim of this strategy is to demonstrate how the Proposed Development has taken into account sustainable methods for waste management following completion and during its operation.

As such, this Strategy provides a review of the requirements placed upon the Proposed Development under national legislation and implemented policy at all levels of Government (i.e. national, regional and local). Consideration has also been given to requirements included in local standards and guidance documents (i.e. London Borough of Camden (LBC) Camden Planning Guidance Supplementary Planning Guidance (SPD) Design (CPG1) (Ref. 6) and British Standards 5906:2005 Waste Management in Buildings, Code of Practice (BS5906:2005) (Ref. 4) to ensure compliance with relevant objectives and targets. An outline of the methodology used to identify and estimate volumes of waste generated during the operational phase of the Proposed Development has been provided. Following this, a summary of the approach taken with regards to waste management within the Proposed Development is provided. This includes details regarding waste handling, storage area provision and waste collection arrangements. All waste reduction measures and compliance with British Standards, Duty of Care and LBC's own policies are also discussed as part of this Strategy.

It is anticipated that waste generated by the demolition and construction phase of the Proposed Development will be addressed through a separate Site Waste Management Plan (SWMP). The SWMP will be the responsibility of the appointed contractor to ensure that appropriate waste management measures are adopted during this phase of the Proposed Development, so as to comply with relevant legislation and policy (i.e. the SWMP Regulations 2008).

This Strategy has been written by URS using information provided by the Applicant and Sheppard Robson Architects.

2. LEGISLATION / PLANNING POLICY

This section of the Strategy reviews waste legislation considered relevant to the Proposed Development. In addition, national, regional and local waste management planning policy requirements within LBC that relate to the Proposed Development are also discussed.

2.1. Summary of Relevant Legislation

Most of the key UK waste related legislation has been derived from European Union (EU) Directives that have been transposed into UK law via the following legislative instruments:

- Clean Neighbourhoods and Environment Act 2005 (Ref. 7);
- Control of Pollution (Amendment) Act 1989 (COPA) (Ref. 8);
- The Environment Act 1995 (Ref. 9);
- Environmental Protection Act 1990 (EPA) (Ref. 10);
- The Animal By-Products (Enforcement) (England) Regulations 2011 (Ref. 11);
- The Controlled Waste (England and Wales) (Amendment) Regulations 2012 (Ref. 12);
- The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2013 (Ref. 13);
- The Environmental Protection (Duty of Care) (England) (Amendment) Regulations 2003 (Ref. 2);
- The Hazardous Waste (England and Wales) (Amendment) Regulations 2009 (Ref. 14);
- The List of Wastes (England) (Amendment) Regulations 2005 (Ref. 15);
- The Packaging (Essential Requirements) (Amendment) Regulations 2013 (Ref. 16);
- The Producer Responsibility Obligations (Packaging Waste) (Amendment) Regulations 2013 (Ref. 17);
- The Site Waste Management Plans Regulations 2008 (Ref. 1);
- The Waste Batteries and Accumulators Regulations 2009 (Ref. 18);
- The Waste Electrical and Electronic Equipment (WEEE) (Amendment) Regulations 2010 (Ref. 19);
- The Waste (England and Wales) (Amendment) Regulations 2012 (Ref. 20); and

- The Waste Management (England and Wales) Regulations 2006 (Ref. 21).

2.2. National Planning Policy

2.2.1. Waste Strategy for England, 2007

The Waste Strategy for England (Ref. 22) sets out the Government's views on waste management. The Strategy commits to setting new national targets for the reduction of household waste through recycling and composting by at least 45% by 2015 and 50% by 2020, in comparison to levels recorded in the year 2000. The Department for Environment, Food and Rural Affairs (Defra) is dedicated to the on-going monitoring of waste and is committed to the continued reviewing of targets to maintain a sustainable waste strategy.

2.2.2. Government Review of Waste Policy in England, 2011

In order to ensure that the UK is on the path towards a 'zero waste' economy, a review of all waste policy in England was undertaken by Defra in 2011 (Ref. 23). The review found that waste management has made significant progress over the last ten years with regards to diverting waste from landfill and increasing levels of recycling. However, it also identified a number of challenges, most notably ensuring waste prevention wherever possible and increasing recycling of waste for both households and businesses. The review also highlighted the need to deliver environmental benefits, support economic growth and ensure a more sustainable approach to the use of materials whilst improving waste services.

2.2.3. National Planning Policy Framework, 2012

The National Planning Policy Framework (NPPF) (Ref. 24) was published on the 27 March 2012. The NPPF outlines Government's planning policies for England and how they are expected to be applied. It acts to replace the previous planning policy statements and guidance notes, resulting in a simpler planning framework for local planning authorities (LPA). However, the NPPF does not contain specific waste policies, therefore, Planning Policy Statement 10: Planning for Sustainable Waste Management (PPS10) (Ref. 25) will remain in place until the National Waste Management Plan for England is published. The National Waste Management Plan for England is currently under consultation. Following this period of consultation, and any necessary alterations, it is anticipated the National Waste Management Plan for England will be adopted later this year (i.e. within 2013).

2.2.4. Planning Policy Statement 10: Planning for Sustainable Waste Management, 2011

As outlined in section 2.2.3 of this Strategy, PPS10 will remain a material planning consideration until the National Waste Management Plan is published. PPS10 provides policy advice to help local planning authorities (LPAs) and individual developers deliver waste management facilities and manage waste more effectively. The overall objective of PPS10 is to protect human health and the environment by producing less waste and by

using it as a resource wherever possible. Under PPS10, LPAs are required to prepare strategies that deliver the following objectives:

- Help deliver sustainable development through driving waste management up the waste hierarchy, addressing waste as a resource and looking to disposal as the last option;
- Help implement the key objectives and targets from the National Waste Strategy for England; and ensure consistency with obligations required under European waste legislation and other relevant guidance and legal controls; and
- Ensure the design and layout of new development supports sustainable waste management.

2.3. Regional Policy

2.3.1. The London Plan, Spatial Development Strategy for Greater London, 2011

The London Plan Spatial Development Strategy for Greater London (Ref. 26) (hereafter referred to as the 'London Plan') outlines the Mayor's commitment to making better use of waste and its management in an attempt to reduce London's impact on climate change. The London Plan describes waste as a valuable resource that can be exploited for London's environmental, economic and social benefit. As outlined in Table 1, the London Plan emphasises the importance of four policies in relation to waste management.

Table 1 The London Plan 2011 Waste Management Policies

Policy	Description
Policy 5.3 Sustainable Design and Construction	States that the highest standard of sustainable design and construction should be achieved in developments to improve the environmental performance of new developments. This should be achieved through a number of sustainable design principles including minimising the generation of waste and maximising reuse and recycling.
Policy 5.16 Waste Self-sufficiency	States that the Mayor will work with various stakeholders and authorities to ensure that by 2031, 100% of London's waste will be managed within London and zero biodegradable or recyclable waste will be sent to landfill.
Policy 5.17 Waste Capacity	States the need to increase the waste processing capacity in London and that all new developments should have suitable waste and recycling storage facilities.
Policy 5.18 Construction, Excavation and Demolition Waste	States that waste should be removed from construction sites, and materials brought to the site, by water or rail transport wherever that is practicable.

2.3.2. The London Plan, Revised Early Minor Alterations, 2012

The London Plan Revised Early Minor Alterations (Ref. 27) were published in June 2012 with the aim of ensuring compliance of the London Plan with the NPPF. In regards to waste, the Revised Early Minor Alterations state that the Mayor intends to work closely with agencies and authorities in neighbouring regions in order to develop and implement policies pertaining to waste management.

2.3.3. The GLA Supplementary Planning Guidance – Sustainable Design and Construction, 2008

The Greater London Authority (GLA) Supplementary Planning Guidance (SPG) Notes (Ref. 28) were produced to provide additional detail regarding certain policies of the London Plan. In relation to waste and recycling, SPG Sustainable Design and Construction promotes sustainable construction across London. Key standards are set as part of this SPG for a range of sustainability issues, including sourcing of materials (section 2.3.3) and waste management within new developments (section 2.7) with the aim to minimise, reuse and recycle as much as is physically practicable. Under this guidance it is also required that by 2020 there will be sufficient provision of facilities to recycle 70% of commercial and industrial waste.

2.3.4. The Municipal Waste Management Strategy, 2011

The Municipal Waste Management Strategy (Ref. 29) provides further policy guidance on the management of municipal waste in addition to policies contained within the overarching London Plan. The strategy sets six additional targets listed in Table 2 which aim to reduce the amount of municipal waste generated by the capital and significantly increase recycling and composting performance. The strategy goes onto explain that municipal waste which cannot be re-used or recycled will be used to produce energy from waste in the most environmentally sensitive way possible.

Table 2 The London Municipal Waste Management Strategy Targets

Target	Description
Target 1	Achieve zero municipal waste sent directly to landfill by 2025.
Target 2	Reduce the amount of household waste produced in 2008/09 from 970 kilograms (kg) per household to 790kg per household by 2031; this is equivalent to a 20% reduction per household.
Target 3	Increase London's capacity to re-use municipal waste from approximately 6,000 tonnes each year in 2008 to: • 20,000 tonnes a year in 2015; and • 30,000 tonnes a year in 2031.
Target 4	With respect to municipal waste, recycle or compost at least: • 45% by 2015; • 50% by 2020; and • 60% by 2031.
Target 5	Cut London's greenhouse gas emissions through the management of London's municipal waste, achieving annual greenhouse gas emission savings of approximately: • 545,000 tonnes of carbon dioxide equivalent (CO_2e) in 2015; • 770,000 tonnes of CO_2e in 2020; and • 1,000,000 tonnes of CO_2e in 2031.
Target 6	To generate as much energy as practicable from London's organic and non-recycled waste in a way that is no more polluting in carbon terms than the energy source it is replacing.

2.4. Local Policy

2.4.1. North London Waste Authority

The North London Waste Authority (NLWA) comprises the London Boroughs of Barnet, Camden, Enfield, Hackney, Haringey, Islington and Waltham Forest. Under this partnership the NLWA and its seven constituent Boroughs are working together to identify new waste management facilities capable of managing waste generated in North London, as per targets of the London Plan. To achieve this, the NLWA have devised three documents which set out the planning framework for waste management within the NLWA and targets for waste prevention, reduction, reuse and recycling. These three documents are listed as follows:

- North London Waste Plan (NLWP) Proposed Submission Version, 2011 (Ref. 30);
- North London Joint Waste Strategy (NLJWS), 2009 (Ref. 31); and
- North London Waste Prevention Plan (NLWPP), 2012 (Ref. 32).

2.4.2. London Borough of Camden Local Development Framework, Core Strategy, 2010

The LBC Local Development Framework (LDF) Core Strategy was adopted on the 10 November 2010 (Ref. 33). The Core Strategy is the principal document in the LDF and provides the vision, objectives and spatial policies required to guide the Borough through to 2025. As such, the Core Strategy plays an integral role in shaping the Borough, balancing the needs of residents, business and future generations alike.

With regards to waste, Policy CS18: Dealing with our waste and encouraging recycling, emphasises the need to find better methods for managing waste generated within the LBC. This approach includes reducing the amount of waste generated, increasing reuse and recycling rates and finding new sites for additional waste management facilities. Policy CS18 also highlights the fact that the LBC cannot adequately management waste generated within the Borough in isolation, validating this position within the NLWA. Specifically, Policy CS18 states that the LBC will seek to make the Borough a *"low waste Borough"* by:

- Reducing the amount of waste produced and increasing recycling and reuse rates;
- Ensuring new developments includes facilities for the storage and collection of waste and recycling;
- Working with partner Boroughs of the NLWA in devising a NLWP; and
- Safeguarding existing waste facilities at Regis Road.

2.4.3. London Borough of Camden, Camden Planning Guidance Supplementary Planning Document, 2011

The LBC Camden Planning Guidance Supplementary Planning Document (SPD) (Ref. 6) was adopted on 6 April 2011. The SPD was developed to support policies of the LBC Core Strategy and forms an additional material consideration in planning decisions. The SPD covers a range of topics, building on guidance of the Core Strategy and strengthening its policies.

With regards to waste, Camden Planning Guidance 1 (CPG1): Design provides additional guidance for waste and recycling aspects of planning applications and new developments. It seeks to ensure that appropriate storage for waste and recyclables is provided in all developments within LBC. As such, the key aim of this guidance is to assist those involved in the design and management of buildings so that the best option for waste provision is allocated within new developments and the amount of material which can be sent for recycling is maximised.

3. DESCRIPTION OF WASTE STREAMS/SYSTEMS

Article 3(1) Directive 2008/98/EC (Ref. 34) defines waste as *"any substance or object which a holder discards or intends to discard".* In reality, waste is not a single substance and a residential development (once operational) such as the Proposed Development is likely to give rise to a range of different waste types; the method of collection and disposal of these waste types will vary according to the nature and source of the material. Responsibility for the collection and disposal of residential waste arisings primarily falls to LBC, in accordance with requirements of the NLWA.

Table 3 provides descriptions of the various waste types anticipated to be generated by the Proposed Development. Management responsibilities of each waste stream are also discussed.

Table 3 Waste Description and Responsibilities

Waste Type	Description	Responsibility
Biodegradable Municipal Waste (BMW)	BMW is the fraction of municipal waste which will undergo degradation processes within landfill and release methane emissions as a consequence. It is convenient to define BMW by reference to the component materials into which municipal waste is commonly sorted or classified. The biodegradable fractions are: paper and card; green waste; kitchen waste/putrescible; and miscellaneous combustibles. In England, municipal waste is estimated to have an average biodegradability content of 68%.	LBC is responsible for the management of this type of waste*.
Bulky Waste	Bulky waste is defined as any article of waste which exceeds 25 kilograms (kg) in weight. This waste streams comprises large disused items such as white goods, furniture, mass amounts of cardboard, etc.	LBC is responsible for the management of this type of waste. Residents are required to liaise with the LBC regarding collection of any waste arisings.
Controlled Waste	Controlled waste encompasses household, industrial and commercial waste. Controlled wastes are defined in this way because they are controlled by legislation and as such, storage handling, transport and disposal methods must meet certain legal requirements.	LBC is responsible for the collection, treatment and disposal of municipal waste. The waste producer should ensure that waste is collected by licensed and appropriate waste collectors. Commercial waste management companies for collection and disposal of commercial waste.
Demolition and Construction Waste	Waste arising from the construction, repair, maintenance and demolition of buildings and structures, including roads. This waste stream consists mostly of brick, concrete, hardcore, subsoil and topsoil materials, but it can also contain quantities of timber, metal, plastics and (occasionally) hazardous waste materials.	Household derived material is the responsibility of LBC although there is no statutory requirement to collect it. Where a collection is provided, a charge may be levied. Householders may be instructed to deposit such wastes at a Household Waste Recycling Centre. Construction waste derived from commercial sources will be managed by commercial waste operators.
Hazardous Waste	Waste that exhibits properties which render the material dangerous to the environment and/or human health.	Services to receive such wastes must be provided at Civic Amenity sites (i.e. Household Waste Recycling Centres). A London wide collection scheme (for domestic hazardous waste) is provided by the City of London Corporation on behalf of all London boroughs, with the exception of Hillingdon. For all other hazardous waste it is the responsibility of the waste producer to arrange for collection and disposal.
Municipal Waste	Predominantly household waste plus other wastes collected by a WCA or its contractors. Includes collection from municipal parks and gardens waste, beach cleansing waste and any commercial and industrial waste for which the WCA takes responsibility.	LBC is responsible for the management of this type of waste.

Waste Type	Description	Responsibility
Mixed Dry Recyclables	Mixed dry recyclables is the term for a collection of solid waste materials that can be stored and collected in one bin. These materials include cardboard, paper, newspaper, plastic film, plastic bottles, steel and aluminium cans and can be derived from households or commercial properties. Depending on who is responsible for the collection of the mixed dry recyclables (local authority or private contractor) other materials may also be categorised under this term (e.g. glass).	Residential mixed dry recyclables waste is the responsibility of LBC.
Putrescible Waste	Waste that is organic in nature and comprises mainly of food (be it cooked or uncooked) from kitchens and other catering establishments. Food waste from food retailers is also classified as putrescible. The treatment of putrescible wastes must be in accordance with the Animal By-Product Regulations.	Separately collected putrescible waste from households is the responsibility of LBC. Such waste from private or commercial sources the collection is the responsibility of the land owner.
Residual Waste	Residual waste is the remaining waste material after separate diversion of waste components though reduction, reuse, recycling, home composting and/or garden waste and food waste collections.	Residential residual waste is the responsibility of LBC.
Unique Waste	Waste which is not produced on a regular basis and consists of WEE, printer and toner cartridges, fluorescent light bulbs and waste generated by building maintenance works (i.e. paints, waste lubricating oils, etc.).	Management of this waste stream is on special arrange with a registered waste handler for the specific waste stream in question.
Waste Electronic and Electrical Equipment (WEEE)	WEEE must be managed and collected and disposed of in line with the WEEE Regulations.	Household and commercial derived material is the responsibility of the producer. However, council's normally arrange for collection for which a charge may be levied.

** Note: As LBC forms a constituent boroughs of the NLWA, where responsibility for waste collection and disposal falls to LBC this will be undertaken in line with any objectives, targets and requirements of the NLWA (in accordance with the proposed NLWP and NLJWS; see section 2.4.1 of this Strategy).*

4. METHODOLOGY

This Strategy identifies waste management objectives and targets that the Proposed Development is required to comply with. The main waste streams arising from the Proposed Development once completed and operational are identified. Following this, the approach taken with regards to waste management during the operational phase is discussed. This includes details concerning waste handling, storage provision and waste collection arrangements. This approach has been taken in order to create a sustainable programme of waste management that results in high levels of environmental performance.

Once complete and operational, the Proposed Development will provide a residential scheme. In total six blocks will be provided by the Proposed Development and include a mixture of one to four bedroom flats. The following sections detail how waste arisings have been estimated for the Proposed Development.

4.1. Operational Waste Generation

Quantities of waste anticipated to be produced by the operational phase of the Proposed Development, and the associated waste composition, have been calculated and co-ordinated in accordance with the following guidance:

- LBC Camden Planning Guidance SPD, 2011; and
- British Standards 5906:2005 Waste Management in Buildings, Code of Practice (BS5906:2005).

The required information for this report (i.e. area schedules and floor plans) has been provided by Sheppard Robson Architects.

4.1.1. Residential

LBC provide specific guidance for the storage of residential waste arisings within the LBC Camden Planning Guidance SPD. This guidance states that 0.15 metres cubed (m^3) of waste is expected to be produced for a one bedroom unit, with a further 0.05m^3 produced for each additional bedroom; this total includes mixed dry recyclables and residual (i.e. non-recyclable) waste. Table 4 outlines the storage requirements for residential waste generated by the Proposed Development, in accordance with LBC guidance.

Table 4 LBC Residential Storage Capacity Guidelines

Unit Type	Weekly Waste Arisings (m^3)	Weekly Waste Arisings (litres, L)
Studio/1 bed	0.15	150
2 bed	0.20	200
3 bed	0.25	250
4 bed	0.30	300

** A conversion factor of 1,000 has been used to convert between m^3 and L.*

LBC also advise the following with regards to storage of residential waste arisings:

- Internal storage must allow for separation of recyclables at source and include space for mixed dry recyclables, organic kitchen food waste and residual (i.e. non-recyclable) waste. Internal storage of mixed dry recyclables must be at least twice the capacity of storage for residual waste;
- External storage must be provided to accommodate mixed dry recyclables and residual waste that is in proportion to the size of the Proposed Development; and
- Whilst LBC provide a twice weekly collection service, storage should be provided to accommodate waste produced over an eight day period.

4.1.2. Waste Growth Rates

Estimates of waste inflations vary widely and, therefore, inflationary waste growth predictions have not been applied to the waste calculation estimates for the Proposed Development. Previous statistics for municipal waste growth predicted year-on-year increases in waste production of 2-3% (Ref. 35; Ref. 36). Recent Defra figures have suggested that waste growth has stabilised and may actually be declining at a rate of 0.5% per year (Ref. 37). It is likely that the latter situation is most appropriate to the Proposed Development. This is because the long-term population of the Proposed Development is unlikely to change significantly, and widespread initiatives to reduce waste and improve materials reuse and recycling are likely to reduce long-term production of waste from the operational uses of the Proposed Development. Therefore, it is likely that the current waste production and storage requirements will represent a reasonable worst-case scenario, and as such should form the basis for long-term waste management provisions.

5. THE PROPOSED DEVELOPMENT

The Proposed Development will provide a residential scheme totalling approximately 15,566 square metres (m^2) Gross Internal Area (GIA). In total, 166 residential units will be provided by the Proposed Development; these units will be divided between six blocks comprising a mixture of one to four bedroom flats. The 166 residential units will include provision for social rented, intermediate and private housing.

The waste and servicing requirements of the Proposed Development are based on the area schedule provided by Sheppard Robson Architect, as detailed by Table 5; a breakdown of each individual block of the Proposed Development is also included within Table 5.

Table 5 Proposed Area Schedule of the Proposed Development

Block	No. of Units	Working Capacity
Block A (Social rented)	21	42 bedrooms
Block B (Social rented)	25	53 bedrooms
Block C (Intermediate)	38	53 bedrooms
Block D (Private)	21	41 bedrooms
Block E (Private)	29	50 bedrooms
Block F (Private)	32	63 bedrooms
Total	**166**	**302 bedrooms**

6. COMPLETED AND OPERATIONAL PHASE

6.1. Waste Generation

With regards to waste management of the Proposed Development, this Strategy has the following aims:

- To contribute towards achieving current and long-term Government, GLA, NLWA and the LBC's targets for waste minimisation, recycling and re-use;
- To ensure that all legal requirements for handling operational waste management are complied with;
- To achieve high standards of environmental performance and, due consideration has and will continue to be given to the waste generated by the buildings during construction and operation; and
- To provide residents with convenient, clean and efficient waste systems that enhances the operation of the buildings and promote high levels of recycling.

The following paragraphs provide a brief explanation as to how waste arisings have been calculated for the operational phase of the Proposed Development. A description of waste handling, storage, management and collection techniques to be employed by the Proposed Development is also included.

6.1.1. Residential

As outlined in section 4.1.1 of this Strategy and Table 4, residential waste arisings generated by the Proposed Development have been calculated in accordance with LBC guidance. Table 6 summarises the total estimates of weekly residential waste arisings produced by the operational Proposed Development. Daily waste arisings are also provided, which form the basis for calculating the eight day storage capacity requirements for residential land use with communal bin stores, as per LBC guidance.

Table 6 Estimated Residential Waste Arisings

Unit Type	No. of Units	No. of Bedrooms	Weekly Waste Arisings (L)	Daily Waste Arisings (L)
Block A (Social rented)				
1 bed	8	8	1,200	171
2 bed	8	16	1,600	229
3 bed	2	6	500	71
4 bed	3	12	900	129
Total	*21*	*40*	*4,200*	*600*
Block B (Social rented)				
1 bed	3	3	450	64
2 bed	16	32	3,200	457
3 bed	6	18	1,500	214
Total	*25*	*47*	*5,150*	*735*

Unit Type	No. of Units	No. of Bedrooms	Weekly Waste Arisings (L)	Daily Waste Arisings (L)
Block C (Intermediate)				
1 bed	23	23	3,450	493
2 bed	15	30	3,000	429
Total	*38*	*53*	*6,450*	*922*
Block D (Private)				
1 bed	3	3	450	64
2 bed	16	32	3,200	457
3 bed	2	6	500	71
Total	*21*	*41*	*4,150*	*592*
Block E (Private)				
1 bed	9	9	1,350	193
2 bed	19	38	3,800	543
3 bed	1	3	250	36
Total	*29*	*51*	*5,400*	*772*
Block F (Private)				
1 bed	4	4	600	86
2 bed	25	50	5,000	714
3 bed	3	9	750	107
Total	*32*	*64*	*6,350*	*907*
Overall				
1 bed	**50**	**50**	**7,500**	**1,071**
2 bed	**99**	**198**	**19,800**	**2,829**
3 bed	**14**	**42**	**3,500**	**499**
4 bed	**3**	**12**	**900**	**129**
Total	***166***	***302***	***31,700***	***4,528***

Note: Numbers may not add due to rounding.

6.2. Storage and Management

6.2.1. Residential Waste

In accordance with LBC guidance, an eight day storage provision has been allocated for residential waste arisings of the Proposed Development. This is to ensure that sufficient capacity is available should collections be missed due to bank holidays, vehicle failure or industrial action. Residents will be expected to segregate waste at source into the three designated waste streams; mixed dry recyclables, organic food waste and residual waste. Mixed dry recyclables and residual waste will be collected on a weekly basis with food waste undergoing collection twice weekly.

Following separation, residents of Blocks A and B will be required to transport waste to the communal bin store located on the ground floor. Residents of Blocks C, D, E and F will also be required to transport waste to the ground floor bin stores, with each block provided with individual bin stores. Mixed dry recyclables and residual waste will be stored in 1,100L Euro bins designated for each waste stream; organic food waste will be stored in 500L Euro bins. Figure 1 outlines the ground floor plan of the Proposed Development and details the location of each bin store.

A summary of the residential storage requirements of the Proposed Development is provided by Table 7; the compositional stream split has been based on guidance provided by BS5906:2005.

Table 7 Residential Waste Storage Requirements

Block	Waste Stream	Vol. of waste per day (L)	Vol. of waste per 8 day week (L)	No. of Euro bins
Block A (Social rented)	Mixed dry recyclables (50%)	300	2,400	2 x 1,100L
	Organic food waste (12.5%)	75	600	2 x 500L
	Residual waste (37.5%)	225	1,800	2 x 1,100L
	Total (100%)	*600*	*4,800*	*5 x 1,100L* *2 x 500L*
Block B (Social rented)	Mixed dry recyclables (50%)	368	2,944	3 x 1,100L
	Organic food waste (12.5%)	92	736	2 x 500L
	Residual waste (37.5%)	276	2,208	2 x 1,100L
	Total (100%)	*735*	*5,880*	*5 x 1,100L* *2 x 500L*
Block C (Intermediate)	Mixed dry recyclables (50%)	461	3,688	4 x 1,100L
	Organic food waste (12.5%)	115	920	2 x 500L
	Residual waste (37.5%)	346	2,768	3 x 1,100L
	Total (100%)	*922*	*7,376*	*7 x 1,100L* *2 x 500L*
Block D (Private)	Mixed dry recyclables (50%)	296	2,368	3 x 1,100L
	Organic food waste (12.5%)	74	592	2 x 500L
	Residual waste (37.5%)	222	1,776	2 x 1,100L

Block	Waste Stream	Vol. of waste per day (L)	Vol. of waste per 8 day week (L)	No. of Euro bins
	Total (100%)	*592*	*4,736*	*5 x 1,100L 2 x 500L*
Block E (Private)	Mixed dry recyclables (50%)	386	3,088	3 x 1,100L
	Organic food waste (12.5%)	97	776	2 x 500L
	Residual waste (37.5%)	290	2,320	2 x 1,100L
	Total (100%)	*772*	*6,176*	*5 x 1,100L* *2 x 500L*
Block F (Private)	Mixed dry recyclables (50%)	454	3,632	3 x 1,100L
	Organic food waste (12.5%)	113	904	2 x 500L
	Residual waste (37.5%)	340	2,720	3 x 1,100L
	Total (100%)	*907*	*7,256*	*6 x 1,100L 2 x 500L*
Overall	**Mixed dry recyclables (50%)**	**2,264**	**18,112**	**19 x 1,100L***
	Organic food waste (12.5%)	**566**	**4,528**	**12 x 500L**
	Residual waste (37.5%)	**1,698**	**13,584**	**14 x 1,100L**
	Total (100%)	***4,528***	***36,224***	***33 x 1,100L 12 x 500L***
** Whilst Block E requires 5 x 1,100L Euro bins, an addition 1 x 1,100L Euro bin has been provided, resulting in a total of 6 x 1,100L Euro bins for Block E to ensure sufficient capacity is available across the entire development.*				

6.2.2. Code for Sustainable Homes

It is proposed within the design brief that the residential elements of the Proposed Development will achieve Code for Sustainable Homes (CfSH) Level 4. CfSH states that in order to achieve Level 4, new developments should allow for the greater volume of waste storage from either of the following: Local Planning Authority guidance (i.e. LBC) or BS5906:2005. Guidance provided by LBC for calculating waste storage requirements is outlined in section 4.1.1 and Table 4 of this Strategy. Guidance provided by BS5906:2005 is outlined in the following sections.

6.2.2.1. British Standards

BS5906:2005 states that the total weekly waste arisings (including mixed dry recyclables and residual waste) equates to 30L per unit, with an additional 70L per bedroom. Table 8 outlines BS5906:2005 guidance with regards to waste storage and the quantities of waste anticipated to be produced by the operational Proposed Development.

Table 8 BS5906:2005 Residential Storage Capacity Guidelines

Unit Type	Weekly Storage Capacity (L)
Studio/1 bed	100
2 bed	170
3 bed	240
4 bed	310

6.2.2.2. Storage Requirements and Code for Sustainable Homes

As detailed by Table 4 and Table 8, LBC guidance provides the more conservative methodology for calculating residential waste arisings. This Strategy, and the associated storage provisions of the Proposed Development, has been based on LBC guidance. Therefore, as storage required under LBC guidance is greater than BS5906:2005, requirements of CfSH Level 4 are anticipated to be met by the Proposed Development for waste.

6.2.3. Waste Storage Room Requirements

In line with BS5906: 2005, Part H6 of the Building Regulations (2002) (Ref. 1) and LBC guidance, the following measures must also be adhered in order to ensure that all mandatory waste storage requirements are complied with:

- There will be a space of 150mm between each bin and wall;
- The entrance of the waste room will be free from steps and projections;
- The total horizontal distance a resident will be expected to carry waste from their dwelling to the storage room will not exceed 30m;
- 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;
- Colour coding will be used for bins of different streams;
- The waste room will have adequate lighting, proper ventilation and wash down facilities (waste pipe and drainage);
- Gullies will be positioned so as not to be in the track of container trolley wheels;
- Headroom in the waste rooms will have a minimum clearance of 2.2 metres (m);
- All bins will be accessible in the bin store;
- The storage facilities will not block any utility service point;
- The route between the storage area and collection point will be wide enough to allow bins to pass through easily and does not involve being taken through a building;
- Any access doors to the bins must be without locks unless standard Fire Brigade locks are used; and
- The store will contain instructional signage detailing correct use of facilities.

6.2.4. Bulky Waste

Within the LBC Camden Planning Guidance SPD, LBC advise that consideration must be given to the storage of discarded bulky waste items (i.e. white goods, disused furniture, etc.). LBC recommend that 0.3m^2 of floor space is provided per person for the storage of bulky waste. Each store should be a minimum of 7.5m^2 in floor area. Stores must be fitted with double doors giving a clear opening of 1,830 millimetres (mm) and a height of 1,830mm with direct vehicular access. For the purpose of this Strategy, it has been assumed that there is one person per bedroom; bulky waste calculations have been conducted on this basis.

It is currently anticipated that a dedicated bulky waste store will be provided between the bin stores of Blocks A and B at ground floor level (see Figure 1). On the lower ground floor, a further dedicated bulky waste store will be provided underneath the concierge (see Figure 2). Sufficient space will be provided within the dedicated bulky waste stores for the temporary storage of waste arisings from future maintenance and fit-out activities In addition to these dedicated stores, five temporary bulky waste stores will be provided on the lower ground floor of the Proposed Development within the bicycle stores of each block (see Figure 2); these stores are anticipated to be used as to temporarily store bulky waste on and ad hoc basis. Table 9 outlines the approximate sizes of the bulky waste stores and the temporary bulky waste stores provided by the Proposed Development.

Residents will liaise with the LBC and internal management team regarding the collection of any bulky waste arisings. On collection days the internal management team will be on hand to ease collection from the external bulky collection team. Table 9 provides a summary of bulky waste storage provision for the Proposed Development.

Table 9 Bulky Waste Storage

Store	Area
Dedicated Bulky Waste Store	
Bulky Waste Store (between Block A and B)	10.1
Bulky Waste Store (under concierge)	59.0
Total	*69.1*
Temporary Bulky Waste Stores	
Block A bulky store	9
Block B bulky store	10
Block C bulky store	5
Block D bulky store	4
Block E bulky store	4
Total	*32*
Overall Total	**101.1**

After correspondence with the Principal Environmental Services Officer at LBC (see Appendix A of this Strategy), the bulky waste storage provision of the Proposed Development (see Table 9) has been agreed. The two bulky waste stores provide an acceptable amount of storage and, when combined with the temporary bulky waste

stores, an extra capacity is provided. This will ensure sufficient space is provided for bulky waste generated by the Proposed Development.

6.2.5. Unique Waste Management

It is likely that a small component of the overall waste arisings from the Proposed Development will consist of other waste streams including WEEE, printer and toner cartridges and fluorescent light tubes. In addition, building maintenance works have the potential to yield materials such as, paints and waste lubricating oils that will require separate storage in dedicated sealed containers. This type of waste is referred to as “unique waste” as it is not produced on a regular basis. Separate arrangements will be made for the storage and safe disposal of these waste streams with a registered waste handler for each specific waste stream, in line with the Hazardous Waste Regulations and WEEE Regulations.

All waste management will comply with the Environmental Protection (Duty of Care) Regulations 2003 and provisions for the safe separation and storage of these wastes will be provided within the Proposed Development.

6.3. Servicing and Collection

6.3.1. Residential Waste

On the day of collection, external LBC waste operatives will have direct access to the ground floor bins stores of Blocks A/B, C, D and E. With regards to Block F, the internal management team will be responsible for transferring waste to the temporary holding area located outside Block B (see Figure 1). Waste arisings from Blocks A/B, C and F will then be collected by LBC refuse collection vehicles, which will access the Proposed Development via St. Pancreas Way. For Blocks D and E, LBC refuse collection vehicles will access the Proposed Development via Rochester Place.

Figure 3 outlines the swept path analysis for the Proposed Development and the routes used by LBC refuse collection vehicles. Appendix B of this Strategy provides email correspondence between LBC and Sinclair Knight Merz (SKM) (transport consultants) regarding the servicing strategy of the Proposed Development.

Figure 1 Ground Floor Plan

Figure 2 Lower Ground Floor Plan

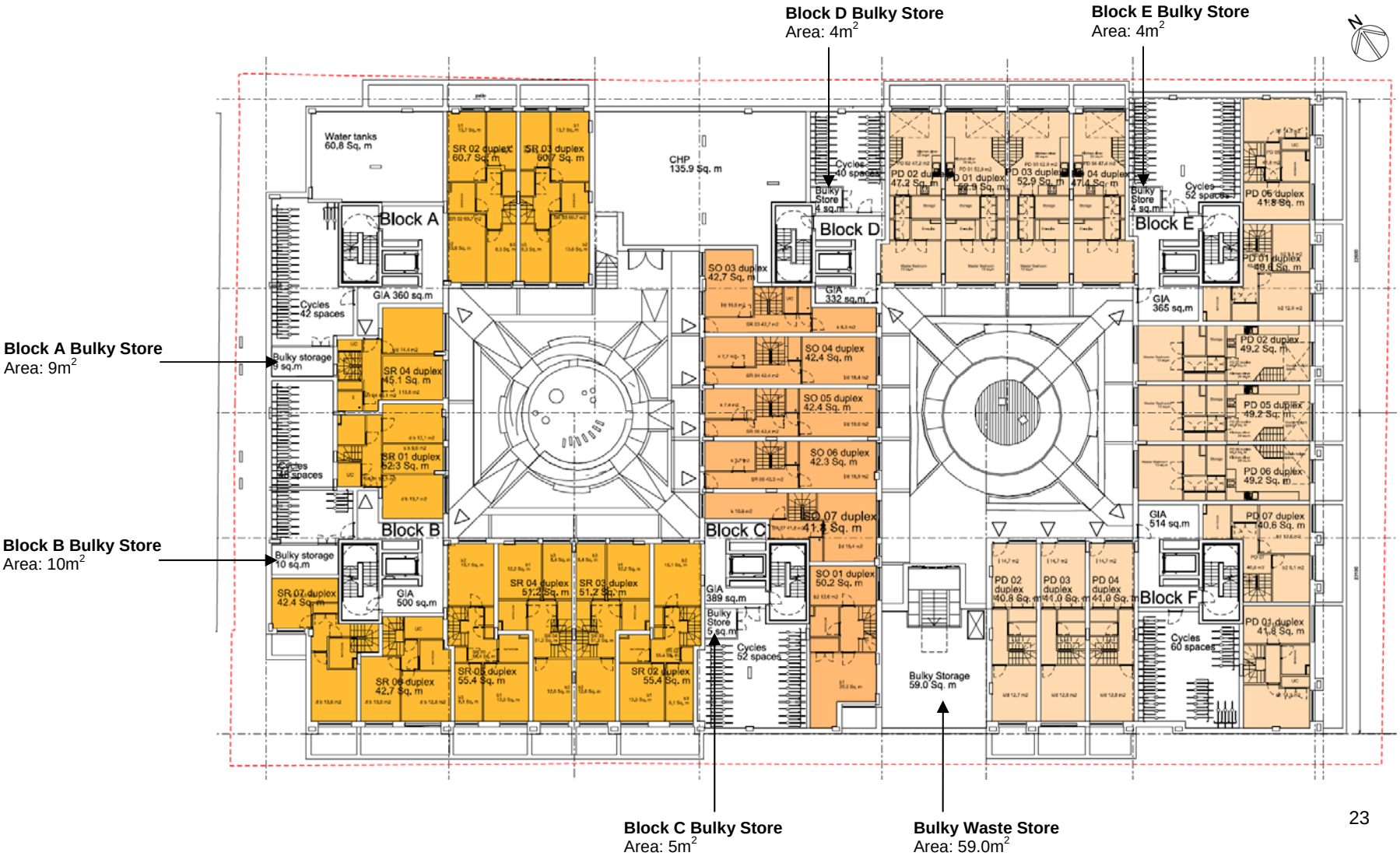

Figure 3 Swept Path Analysis

6.3.2. Collection Requirements

In line with BS5906:2005, Part H6 of the Building Regulations and LBC guidance, the following will be designed into the Proposed Development to ensure that all mandatory waste storage requirements are complied with:

- All vehicle access roads that the waste collection vehicles will be required to use will be constructed to withstand a gross vehicle weight of 26 tonnes;
- Vehicles will be able to enter and exit the site in a forward gear with no need to reverse more than 12 metres (m);
- All service routes for the collection of waste will be a minimum of 5m in width (external);

- There will not be any routes where wheeled bins are to be pushed that will have a gradient more than 1:12, or that include steps or kerbs;
- Turning circles will not exceed 20.3m; and
- The distance between where a container is sited within the Proposed Development and the nearest practicable position that the waste collection vehicle can stop will not exceed 10m.

Further to the above requirements, collection points of the Proposed Development need to be able to accommodate LBC's largest refuse vehicle. At the time of writing, refuse is collected within LBC by Veolia Environnement. Therefore it has been assumed that the same requirements will be relevant once the Proposed Development is complete and operational. After consultation with the LBC, the specifications of refuse vehicles used by Veolia Environnement within LBC have been determined and are provided below (for email correspondence regarding refuse vehicle specifications, please see Appendix B of this Strategy):

- Overall length: 9.86m;
- Overall width; 2.45m; and
- Overall body height; 3.814m.

6.3.3. Off-Site Pollution

Waste management activities have the potential to cause pollution via two predominant routes:

- Leachate generation as waste undergoes various degradation processes; and
- Gas liberation (including methane and hydrogen sulphide) due to biological activity under anaerobic conditions within landfill sites.

To minimise these pollution impacts, the following steps will be undertaken:

- Only appropriately licensed waste carriers will be used in accordance with the Duty of Care Regulations 2003;
- The contractor responsible for waste transport and disposal will be required to provide confirmation that the receiving facility is permitted under both the Environmental Permitting (England and Wales) Regulations 2012 and the Pollution Prevention and Control Regulations 2000 (Ref. 38). This will act to ensure that appropriate controls are in place to monitor and control pollution from waste transport disposal; and
- Where possible, the waste management contractor will manage waste in accordance with the waste hierarchy, avoiding disposal of waste at landfill wherever feasible.

7. SUMMARY AND CONCLUSIONS

The Proposed Development aims to be sustainable with high standards of environmental performance. As such, due consideration has and will continue to be given to waste generated by the Proposed Development during its operation. Waste management within the Proposed Development has the following aims:

- To contribute towards achieving current and long-term government, GLA, NLWA and LBC targets for waste minimisation, recycling and reuse;
- To ensure that all legal requirements for handling and management of waste during the operational phase of the Proposed Development are complied with; and
- To provide tenants with convenient, clean and efficient waste management systems that enhance the operation of the buildings and promote high levels of recycling.

Once complete and operational the Proposed Development is anticipated to produce approximately 31,700L per week (4,528L per day). Of this total, 15,848L will comprise mixed dry recyclables, 3,962L will be formed of organic food waste with the remaining 11,886L expected to be residual waste. Both mixed dry recyclables and residual waste will be stored in 1,100L Euro bins; organic food waste will be stored in 500L Euro bins. All waste streams will be provided with sufficient capacity for eight days' worth of waste generation. Mixed dry recyclables and residual waste will be collected on a weekly basis; food waste will undergo twice weekly collection. All waste will be stored at the ground floor level with the internal management team on hand to ease collection on collection days.

These provisions will ensure that waste produced by the Proposed Development once it is complete and operational will be handled in accordance with The Environmental Protection (Duty of Care) (England) (Amendment) Regulations 2003 at all times. All waste infrastructure introduced to the Proposed Development will comply with Building Regulations Part H6, British Standard BS5906:2005 and the Charted Institute of Building Services Engineers (CIBSE) Guide G and The Environmental Protection (Duty of Care) (England) (Amendment) Regulations 2003. The Proposed Development has been designed to ensure compliance will all relevant policy listed within section 2 of this Strategy.

8. REFERENCES

Ref. 1 HMSO, (2008); Site Waste Management Plans (SWMP) Regulations 2008.

Ref. 2 HMSO, (2003); The Environmental Protection (Duty of Care) (England) (Amendment) Regulations 2003.

Ref. 3 Office of the Deputy Prime Minister, 2002; Building Regulations – Approved Document H: Drainage and Waste Disposal.

Ref. 4 British Standards Institute (BSI), (2005); BS5906:2005 Waste Management in Buildings - Code of Practice.

Ref. 5 Chartered Institute of Building Services Engineers (CIBSE), 2004; Public Health Engineering. CIBSE, London.

Ref. 6 London Borough of Camden (LBC), (2011); Camden Planning Guidance, Supplementary Planning Guidance.

Ref. 7 Her Majesty's Stationery Office (HMSO), (2005); Clean Neighbourhoods and Environment Act 2005.

Ref. 8 HMSO, (1989); Control of Pollution (Amendment) Act 1989.

Ref. 9 The Environment Agency, (1995); Environment Act 1995.

Ref. 10 HMSO, (1990); Environmental Protection Act 1990.

Ref. 11 HMSO, (2011); The Animal By-Products (Enforcement) Regulations 2011.

Ref. 12 HMSO, (2012); The Controlled Waste (England and Wales) (Amendment) Regulations 2012.

Ref. 13 HMSO, (2013); The Environmental Permitting (England and Wales) (Amendment) (No. 2) Regulations 2013.

Ref. 14 HMSO, (2009); The Hazardous Waste (England and Wales) (Amendment) Regulations 2009.

Ref. 15 HMSO, (2005); The List of Wastes (England) (Amendment) Regulations 2005.

Ref. 16 HMSO, (2013); The Packaging (Essential Requirements) (Amendments) Regulations 2013.

Ref. 17 HMSO, (2013); The Producer Responsibility Obligations (Packing Waste) (Amendment) Regulations 2013.

Ref. 18 HMSO, (2009); The Waste Batteries and Accumulators Regulations 2009.

Ref. 19 HMSO, (2010); The Waste Electrical and Electronic Equipment (WEEE) (Amendment) Regulations 2010.

Ref. 20 HMSO, (2012): The Waste (England and Wales) (Amendment) Regulations 2012.

Ref. 21 HMSO, (2006); The Waste Management (England and Wales) Regulations 2006

Ref. 22 Defra, (2007); Waste Strategy for England 2007.

Ref. 23 Defra, (2011); Government Review of Waste Policy in England 2011.

Ref. 24 Department for Communities and Local Government (DCLG), (2012): National Planning Policy Framework.

Ref. 25 DCLG, (2011); Planning Policy Statement 10 (PPS 10), Planning for Sustainable Waste Management..

Ref. 26 Greater London Authority (GLA), (2011); The London Plan, Spatial Development Strategy for Greater London 2011.

Ref. 27 GLA, (2012); The London Plan, Revised Early Minor Alterations.

Ref. 28 GLA, (2008); The London Plan Supplementary Planning Guidance. The Mayor of London's Supplementary Planning Guidance for Sustainable Design and Construction.

Ref. 29 GLA, (2011); The Mayor's Municipal Waste Management Strategy.

Ref. 30 North London Waste Authority (NLWA), (2011); North London Waste Plan, Proposed Submission Version.

Ref. 31 NLWA, (2009); North London Joint Waste Strategy.

Ref. 32 NLWA, (2012); North London Waste Prevention Plan.

Ref. 33 LBC, (2011); Local Development Framework (LDF) Core Strategy.

Ref. 34 Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

Ref. 35 Defra, (2000); National Waste Strategy (for England and Wales).

Ref. 36 Cabinet Office, (2002); Strategy Unit Report - Waste Not Want Not: The Strategy for Tackling Waste Problems in England.

Ref. 37 Resources Futures, (2009); WRO121- Understanding Waste Growth at a Local Authority Level – Final Report to Defra.

Ref. 38 HMSO, (2000); The Pollution Prevention and Control Regulations 2000.

APPENDIX A

Correspondence with the Principal Environmental Services Officer at the London Borough of Camden

Lucy Byrne

From: Baker, Ann <Ann.Baker@Camden.gov.uk>
Sent: 14 October 2013 09:37
To: Lucy Byrne
Cc: Katherine Lees; Planning Applications Replies
Subject: RE: 79 Camden Road - Waste

Hi Lucy,

Thank you for your email below and in principal the container types and sizes are acceptable for the different waste types .

We will just need to know the location and numbers of bins so we can clarify there won't be any servicing issues.

Please let me know if there is any other information you need concerning this.

Kind regards

Ann Baker
Principal Environmental Services Officer

Telephone: 020 7974 8998

From: Lucy Byrne [mailto:Lucy.Byrne@Urs.com]
Sent: 10 October 2013 12:01
To: Baker, Ann
Cc: Katherine Lees
Subject: 79 Camden Road - Waste

Hi Ann,

Following on from our previous telephone conversation I've outlined the waste storage provision for the proposed 79 Camden Road development below. I have based all storage requirements on guidance provided by the London Borough of Camden (LBC) Supplementary Planning Document, Camden Planning Guidance 1 (CPG1): Design.

Waste storage requirements:

- Mixed dry recyclables and residual waste will be stored in 1,100L Euro bins;
- Food waste will be stored in 500L Euro bins;
- All waste streams have been provided with an 8 day storage capacity;
- Mixed dry recyclables and residual waste will be collected once per week; and
- Food waste will be collected twice per week.

Bulky waste:

- Two bulky waste stores will be provided across the development (one on the ground floor and one under the concierge on the lower ground floor);
- Additional separate bulky waste stores will be provided within the bicycle stores of each block on the lower ground floor; and
- Bulky waste has been sized based on 0.3m^2 per person (in accordance with LBC guidance) assuming one person per bedroom.

Could you please confirm that you are happy with the above storage provision?

Kind regards,
Lucy

Lucy Byrne MSci MSc
Graduate Waste Management and Environmental Consultant
URS Infrastructure & Environment UK Limited

St George's House, 5 St George's Road, London, SW19 4DR

Please note my contact details have recently changed:

Direct Tel: +44 (0) 207 963 9803
Email: Lucy.Byrne@Urs.com
http://www.urscorp.com

APPENDIX B

Correspondence between the London Borough of Camden and Sinclair Knight Merz (SKM) regarding the servicing strategy of the Proposed Development (including waste collection vehicle dimensions)

Lucy Byrne

From: Griffiths, Russell <Russell.Griffiths@veolia.co.uk>
Sent: 09 October 2013 08:14
To: Scarratt, Alexander (SKM); Baker, Ann
Subject: RE: Rochester Place

Dear Alexander,

From the plan provide I can see no major problems with collections taking place as described below.

Regards
Russ

From: Scarratt, Alexander (SKM) [mailto:AScarratt@globalskm.com]
Sent: 08 October 2013 14:21
To: Griffiths, Russell; Baker, Ann
Cc: AScarratt@globalskm.com
Subject: RE: Rochester Place

Dear Ann/Russell,

Hope you are well.

Further to our recent discussions, we have developed our scheme option for the development site to the south of Rochester Place and I attach the ground floor layout as it currently stands. The application is some way from being submitted but we thought it prudent to run this past you for comment prior to submission.

The proposals include a number of cores that front either St Pancras Way or Rochester Place, with associated ground floor bin stores.

There are 3 cores (A, D, E) that front Rochester Place and we are proposing for the bins to be collected from these stores using the existing route as described below. Rochester Place is very lightly trafficked and so we envisage the vehicles sitting within the carriageway, with the waste collection team dragging the bins from the store to the rear of the vehicle.

We would be grateful therefore to receive any comments you may have on this access strategy?

Many thanks

From: Griffiths, Russell [mailto:Russell.Griffiths@veolia.co.uk]
Sent: 28 August 2013 12:59
To: Baker, Ann
Cc: AScarratt@globalskm.com
Subject: RE: Rochester Place

Ann,

Please find attached RCV dimensions.

We currently service Rochester Place by travelling south towards Camden Road, however we do have access issues here usually due to poorly parked vehicles or larger parked vehicles.

The current properties in this area, 2 – 12 Rochester Mews & 81 – 83 Camden Road are all serviced from Rochester Mews; we carry out no collections along the section of Camden Road from St Pancras Way to Rochester Road.

Regards
Russ

From: Baker, Ann [mailto:Ann.Baker@Camden.gov.uk]
Sent: 22 August 2013 11:02
To: Griffiths, Russell; Taylor, Bob
Cc: Tillyer, Matthew; 'AScarratt@globalskm.com'
Subject: FW: Rochester Place

Hi,

Please see below.

Would you be able to advise on this query below?

Thanks

Ann Baker
Principal Environmental Services Officer

Telephone: 020 7974 8998

From: Scarratt, Alexander (SKM) [mailto:AScarratt@globalskm.com]
Sent: 22 August 2013 10:58
To: Baker, Ann
Cc: Baker, Jennifer (SKM)
Subject: Rochester Place

Dear Ann,

Thanks for speaking with me earlier.

As discussed, we are looking at a redevelopment proposal at the old council offices bound between Camden Road to the east, St Pancras Way to the south and Rochester Place to the north.

We are investigating the potential for refuse collections from the Camden Road and Rochester Place frontages.

We just wanted to check existing routeings therefore and in particular routings along Rochester Place to serve the residential properties that front Rochester Mews.

I would be grateful if you could therefore liaise with your contractors to see if they already access this area.

It would be also useful if we could get some dimensions of the vehicles that are currently used on this route.

Look forward to hearing from you.

Many thanks

Alex Scarratt
Traffic Engineer

SKM Colin Buchanan

New City Court, 20 St Thomas Street, London, SE1 9RS
T +44 (0) 20 7939 6334 **F** +44 (0) 20 7939 6103 **E** ascarratt@globalskm.com
www.skmcolinbuchanan.com

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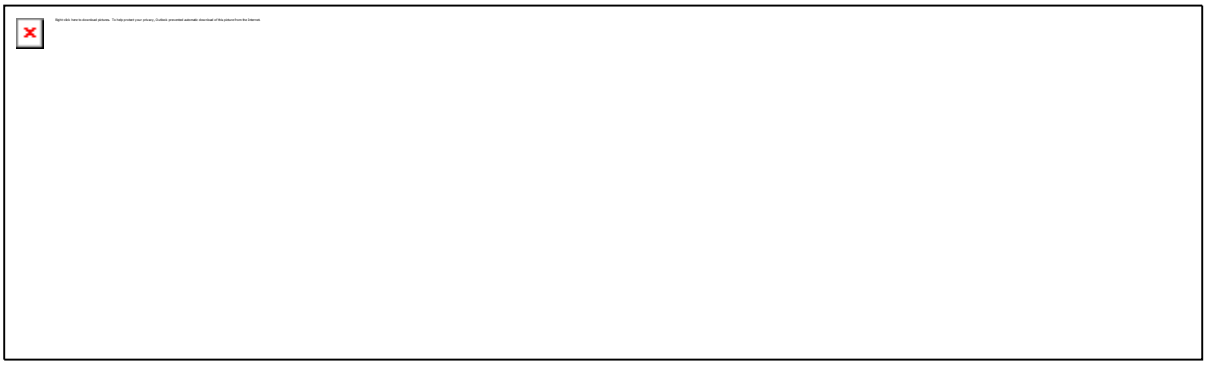

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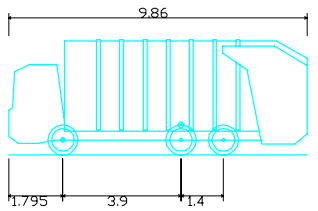

Large Refuse Vehicle (3 axle)

Overall Length	9.860m
Overall Width	2.450m
Overall Body Height	3.814m
Min Body Ground Clearance	0.366m
Track Width	2.450m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	9.500m

REV	DATE	DRAWN	REV'D	APP'D	REVISION
B	02-10-13	DB	AKS	AKS	SITE LAYOUT UPDATED AND ADDITIONAL TRACK
A	05-09-13	DB	AKS	AKS	TRACKING AMENDED

DRAWING STATUS

PRELIMINARY ISSUE

SKM COLIN BUCHANAN

Sinclair Knight Merz Colin Buchanan
New City Court
20 St. Thomas Street
London
SE1 9RS

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Fax: +44(0)20 7939 6103
Web: www.skmconsulting.com

CLIENT
BARRATT HOMES

PROJECT
79 CAMDEN ROAD

DRAWN	DRAWING CHECK	REVIEWED	APPROVED
JL	AKS	AKS	AKS
DESIGNED	DESIGN REVIEW	DATE 21-08-13	DATE 21-08-13
AKS	AKS		

TITLE

DELIVERY, SERVICING AND WASTE COLLECTION STRATEGY

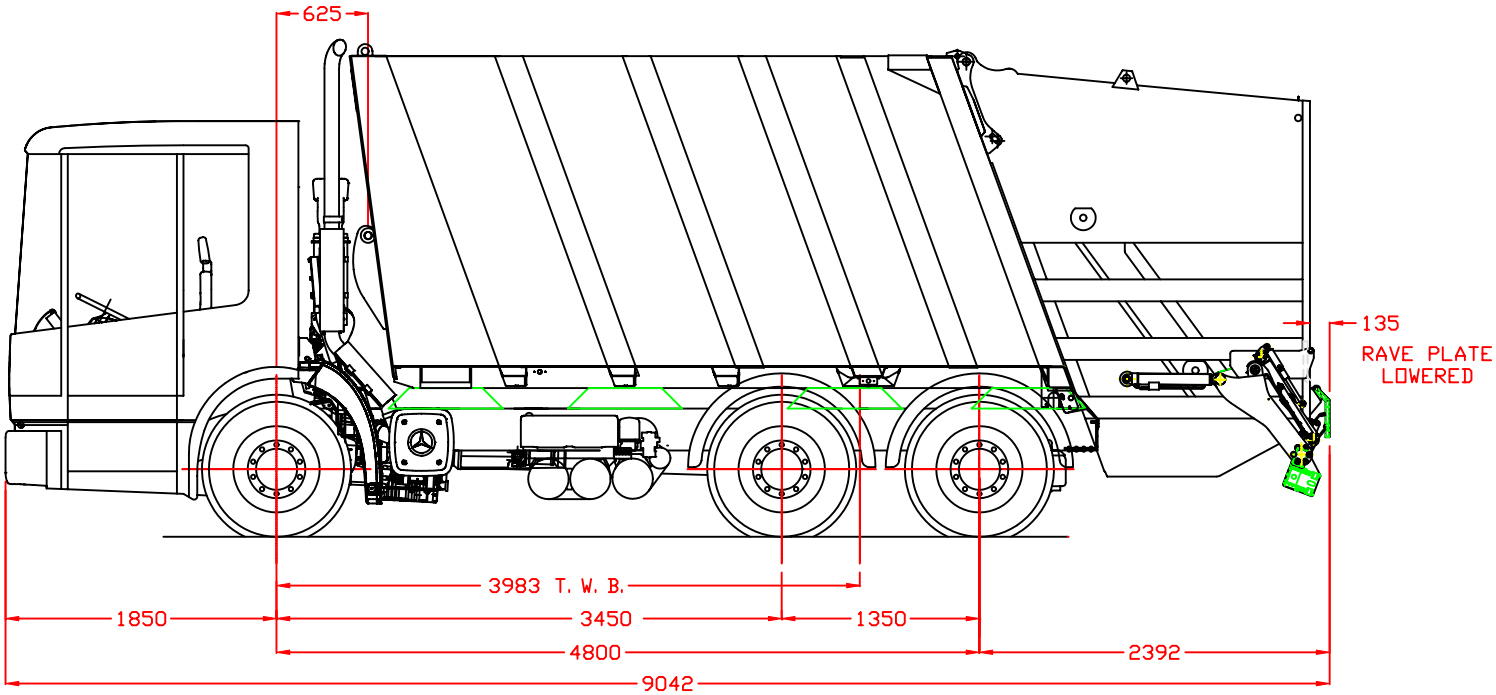
OPTION 2 - ON-STREET SERVICING WITH EXISTING

LOADING CONTROLS AND SHARED FOOTWAY / LOADING FACILITY

SCALE	DRAWING No	REV
1:500	UN60073-ECC-DG-0003	B

A3

MERCEDES ECONIC 6x2 2628LL REAR STEER
W/B 4800 (3450 + 1350) T.W.B. 3983
F.A. 7500 M.A. 11500 R.A. 7500. TOTAL. 26000
FITTED WITH 20M³ VARIOPRESS (211) BODY AND UNILIFT RRP BINLIFTER.



ESTIMATED MEASUREMENTS

	FRONT AXLE	REAR AXLE	TOTAL
CHASSIS & CAB	4210	2900	7110
BODY	148	5852	6000
LIFTER	-292	642	350
OPTIONS	0	0	0
DRIVER + 3	300	0	300
UNLADEN WEIGHT	4366	9394	13760
PLATED AXLE WEIGHT	7500	19000	26000
UNLADEN WEIGHT	4366	9394	13760
LOAD ALLOWANCE	3134	9606	12240
LEGAL PAYLOAD	2030	9606	11636
LEGAL PAYLOAD	2030	9606	11636
UNLADEN WEIGHT	4366	9394	13760
RUNNING WEIGHT	6396	19000	25396

IMPORTANT NOTE

ABOVE CALCULATIONS BASED ON A UNIFORM REFUSE DENSITY AND ARE SUBJECT TO +/- 5% VARIATIONS
BODY POTENTIAL = 12000Kg BASED ON A REFUSE DENSITY OF 100Kg/M @ 6:1 COMPACTION RATIO
ESTIMATES BASED ON CHASSIS & BINLIFTER MANUFACTURERS TECHNICAL LITERATURE

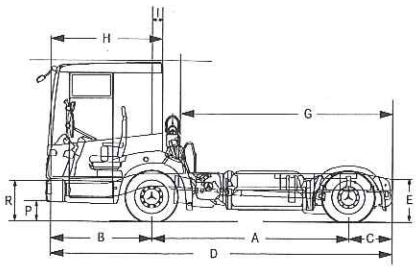
RECOMMENDATION

PLEASE CONTACT FAUN ENGINEERING DEPARTMENT FOR PREFERRED CHASSIS SPECIFICATION
OR IF YOU REQUIRE FURTHER TECHNICAL INFORMATION

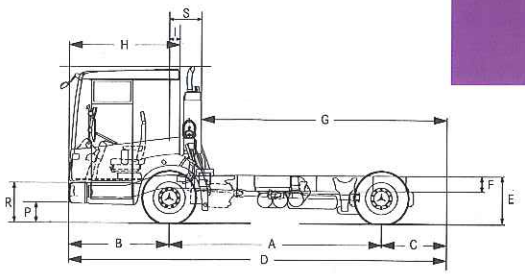
ACCESSORIES SUCH AS HAND WASH UNITS, SACK TRAYS, EXTINGUISHERS, LUBRICATION SYSTEMS, ADVERT PANELS, FLUSH SIDES, LOAD CELLS ETC. ARE NOT INCLUDED IN THE ABOVE CALCULATIONS

PRODUCED	DATE
N.M.	05/12/02
Drawing No FWD1528	
Sheet 1	Issue B

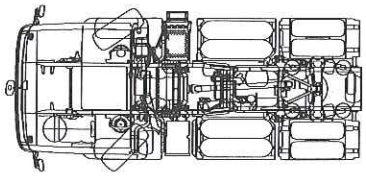
1824LL
1829LL
1828LLSG
1828LLG
2628LLG
2629LL
3233LL



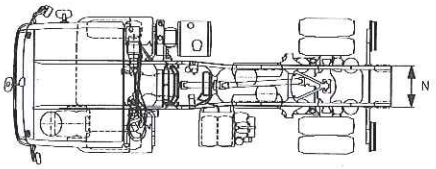
4x2 TRACTOR



4x2 KERBSIDER



4x2 TRACTOR



4x2 RIGID

Dimensions (mm)

		4x2 NGT tractor	4x2 kerbsider	4x2 rigid	6x2 mid steer
A	Wheelbase (first to second axle)*	3450	5100†	3900*	3450
A+	1350mm (outer axle spread)	NA	NA	NA	4800
B	Front overhang	1850	1850	1850	1850
C	Rear overhang	770	1650	1200	1200
D	Overall length	6075	8600	6950	7850
E	Frame height at rear axle	880#	910	910	915
F	Frame depth	284	284	284	284
G	Back of exhaust pipe or air stack to end of frame	3726	6160	4600	5500
H	Bumper to back of cab	2032	2032	2032	2032
I	Back of cab to centre line of front axle	182	182	182	182
J	Overall height (nominal not inc sunroof) - unladen	2820	2870	2870	2885
K	Ground clearance front	135	190	190	205
L	Width over cab	2490	2490	2490	2490
M	Ground clearance rear	180	240	230	245
N	Frame width (at rear)	760	760	760	760
O	Bogie spread	NA	NA	NA	1350
P	First step height from ground	450	495	495	515
R	Cab floor height from ground	795	840	840	860
S	Centre line of front axle to rear of exhaust pipe or air stack	NA	590	500	500
Turning circle (wall to wall) - Tolerence +0.5m, - 0.0m		NA	21.5m	16.1m	19.1m
Minimum cab gap (to rear of exhaust pipe)		NA	50	50	50

* First steer axle to first drive axle on 8x4 model
All heights are in 'laden' condition unless otherwise stated

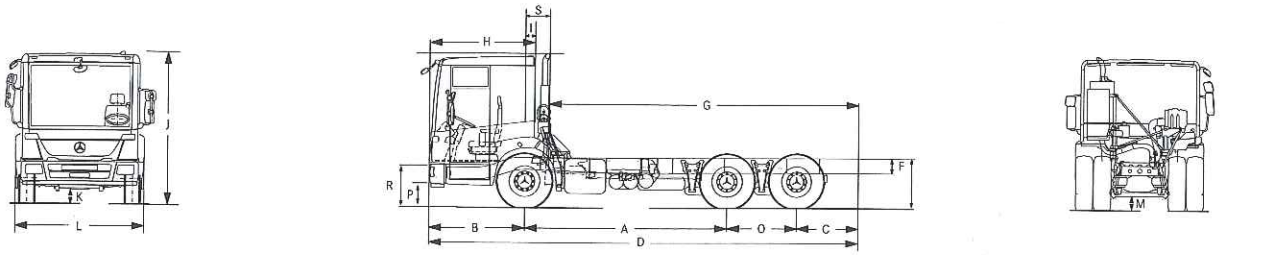
Weights (kg)

	1828LLSG	1824LL 4x2	1824LL 4x2	2629LL 6x2
Kerb weights (kg)				
Front axle	4460	4320	4300	4510
Mid/rear axle	2125	1840	1745	1120/1720
Rear bogie	NA	NA	NA	2835
Total	6765	6160	6045	7345
Plated weights	UK Authorised and design	UK Authorised and design	UK Authorised and design	UK Authorised and design
GVW	18000	18000	18000	26000
Front axle	7500	7100	7100	8000
Steer axle	NA	NA	NA	7500
Drive axle 1	11500	11500	11500	11500
Drive axle 2	NA	NA	NA	NA
GCW	36000	NA	NA	NA

The following overall frame height adjustment is available when stationary:

- 4x2 rigid model: + 100mm, - 60mm
- 6x2 mid steer model: + 80mm, - 60mm
- 6x2 rear steer model: + 100mm, - 60mm
- 6x4 model: + 100mm, - 60mm
- 8x4 model: + 80mm, - 60mm

* Also available with 3450, 4200, 4500mm wheelbase
† 5.7m kerbsider available via CTT modification
\# NGT tractor - height to top of mounting angles



6x4 DOUBLE DRIVE

6x2 MID STEER

8x4 MID STEER

6x2 REAR STEER

6x2 mid steer	6x2 mid steer	6x2 rear steer	6x2 rear steer	6x2 rear steer	6x4 double drive	6x4 double drive	8x4 mid steer
3900	4200	3450	3900	4200**	3900	4200	5100
5250	5550	4800	5250	5550	5250	5550	6450
1850	1850	1850	1850	1850	1850	1850	1850
1200	1200	1200	1200	1200	1200	1200	1200
8300	8600	7850	8300	8600	8300	8600	9500
915	915	915	915	915	960	960	960
284	284	284	284	284	284	284	284
5950	6250	5500	5950	6250	5950	6250	7150
2032	2032	2032	2032	2032	2032	2032	2032
182	182	182	182	182	182	182	182
2885	2885	2885	2885	2885	2925	2925	2925
205	205	205	205	205	290	290	290
2490	2490	2490	2490	2490	2490	2490	2490
245	245	245	245	245	270	270	270
760	760	760	760	760	760	760	760
1350	1350	1350	1350	1350	1350	1350	1350
515	515	515	515	515	565	565	565
860	860	860	860	860	910	910	910
500	500	500	500	500	500	500	500
20.3m	21.1m	14.8m	16.1m	16.9m	19m	20m	22.5m
50	50	50	50	50	50	50	50

2629LL 6x2	2629LL 6x2	2629LL 6x2	2629LL 6x2	2629LL 6x2	2629LL 6x4 double drive	2629LL 6x4	3233LL 8x4
4390	4440	4450	4535	4625	4575	4660	4850
1195/1810	1170/1800	1730/1155	1700/1125	1645/1120	1680	1660	1200
3005	2965	2890	2815	2765	1680	1660	3080
7395	7400	7330	7350	7390	7940	7980	9125
UK Authorised and design	UK Authorised and design	UK Authorised and design	UK Authorised and design	UK Authorised and design	UK Authorised and design	UK Authorised and design	UK Authorised and design
26000	26000	26000	26000	26000	26000	26000	32000
8000	8000	7500	7500	7500	7500	7500	8000
7500	7500	7500	7500	7500	NA	NA	5000
11500	11500	11500	11500	11500	9500	9500	9500
NA	NA	NA	NA	NA	9500	9500	9500
NA	NA	NA	NA	NA	NA	NA	NA

** also available with 4500, 4800mm wheelbase