



**UNIVERSITY
OF LONDON**

GARDEN HALLS, UNIVERSITY OF LONDON

Delivery and Servicing Management Plan

14th March 2013



University of London

Garden Halls, Cartwright Gardens, London – Student Accommodation

Delivery and Servicing Management Plan

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1. Introduction

This Delivery and Service Management Plan (DSMP) has been prepared by Cundall Transportation to inform the redevelopment of the Garden Halls, Cartwright Gardens by the University of London (the Applicant). This report has been commissioned by the applicant's development manager, University Partnership Programme (UPP), to support the planning and conservation area consent applications.

This DSMP has been prepared following discussions with LB Camden and has been prepared in accordance with LB Camden CPG7, Transport, Delivery and Servicing Management Plans and TfL's Delivery and Servicing Plan, Making Freight Work for You.

Consideration has also been given to LB Camden's policies CS5 'Managing the impact of growth and development', DP20 'Movement of goods and materials' and DP26 'Managing the impact of development on occupiers and neighbours' and the development generally complies with each of these policies.

CS5 requires developments to 'protect and enhance the environment and heritage and the amenity and quality of life of local communities' and 'making sure that the impact of developments on their occupiers and neighbours is fully considered'. The development enhances the local environment through the redevelopment of the garden, in addition servicing will be provided on-site which will benefit the neighbours of the development.

DP20 requires developments to 'accommodate goods vehicles on-site' and 'seek opportunities to minimise disruption for local communities through effective management, including through the optimisation of collection and delivery timings and the use of low emission vehicles for deliveries'. Servicing will be provided on-site and this will be monitored through this DSMP.

DP26 requires developments to consider various elements regarding the impact of development on occupiers and neighbours taking into consideration items such as 'noise and vibration level', odour, fumes and dust' and developments are required to have 'facilities for the storage, recycling and disposal of waste'. The development of this DSMP details the various design proposals which seek to address these issues.

The Applicant has confirmed that the DSMP will be implemented post construction and will be supported by the UPP who will manage the accommodation.

Redevelopment of the existing student accommodation comprising the demolition of Canterbury (including York) and Commonwealth Halls, partial-demolition and refurbishment of Hughes Parry Hall and provision of new student accommodation (Sui Generis) to provide a net increase of 187

units (from 1,013 to 1,200 student bed-spaces); associated ancillary uses (including communal areas); two external courtyards; together with public realm improvements to Cartwright Gardens and the surrounding area.

UPP manages in excess of 28,000 student bedrooms across England and is able to use this experience in the development of effective and bespoke management plans for each site.

2. Delivery and Service Management

2.1 What is a Delivery and Service Management Plan?

A DSMP provides a framework to ensure that freight vehicle activity to and from a building / development is working effectively for the occupier and local residents.

Any site that receives deliveries and servicing activity can benefit from a DSMP, whether it is small or large, or shared by multiple organisations.

2.2 Why is a Delivery and Service Management Plan required?

This DSMP is required by LB Camden to minimise the impact of delivery and servicing trips to the site, as far as possible, to safeguard the amenity of local residents. This strategy is the freight equivalent of a Travel Plan and will therefore be the responsibility of the Travel Plan Coordinator (TPC). The existing facility has three main areas which are currently used for servicing the Halls, the proposals will result in one service area which is located off the highway, this has been designed to reduce noise nuisance to neighbours.

There are three main elements of a DSMP:

- A strategy to reduce the number of trips, particularly in the peak period, justified by the benefits of using consolidation;
- A strategy showing when and where deliveries and servicing can take place safely and legally; and
- Details of contractual changes requiring suppliers and servicing companies to reduce the number of trips and to use legal loading facilities. The selection process for supply and servicing contracts will specify that consideration is given to local suppliers and membership of the Freight Operator Recognition Scheme.

2.3 Benefits of a Delivery and Service Management Plan

There are many benefits of implementing a DSMP for the organisation, the local community and the suppliers, these are outlined below.

2.3.1 Better for Business

Time and money – lower operating costs (eg fuel) through consolidation into larger and less frequent deliveries. Frees up staff time spent receiving deliveries and the potential of economies of scale when procuring services

2.3.2 Better for the Environment and Local Community

Safety – fewer deliveries reduces exposure to risk of accidents.

The environment – less emissions, to be a 'good neighbour', less congestion and noise impacts.

Demonstrating a commitment to corporate social responsibility, can build a better reputation with staff, key stakeholders and across the local community.

2.3.3 Benefits to suppliers/freight operators

Cost savings through fuel savings from reduced mileage and less risk of parking illegally and attracting penalty charge notices.

Increased certainty over delivery times.

Reduced risk of collisions due to fewer journeys and less likely to unload in an unsafe location.

2.4 Objective

The objectives of the DSMP will be to ensure that the service yard operates efficiently and effectively, thereby minimising any incidence of potential disruption from the service yard on the highway by noise disturbance to local residents.

3. Site Assessment

3.1 Proposed Development

The proposed development involves the refurbishment of Hughes Parry Hall and demolition of Canterbury Hall (including York) and Commonwealth Hall and the construction of a new building, with an increased number of bedrooms within the Garden Halls of Residence increasing to accommodate 1200 students with associated dining facilities.

The site is bound by Hasting Street to the north, Sandwich Street to the east, Cartwright Gardens to the west and Leigh Street to the south.

As environmentally responsible organisations, the Applicant and UPP promote the principle of maximising recycling. The site specific solutions for waste management take into consideration:

- legislative compliance;
- reductions in landfill; and
- staff and student expectations.

It is a stated aim of UPP's Sustainability and Environmental Strategy to systematically reduce resource consumption through best practice environmental management and cultural change.

3.1.1 Staff, residents and visitor numbers

Although the redevelopment will increase the number of residents from 1013 to 1200, the new and consolidated facilities are not likely to result in additional staff numbers at the Halls.

3.2 Local Highway

The streets surrounding the proposed development are all subject to limited waiting for heavy goods vehicles (HGV) and buses. The restriction prevents buses and HGV (over the maximum gross weight of 5 tonnes) and buses waiting on the highway during the hours of 6.30 pm to midnight and midnight to 8 am.

Limited on-street car parking is available in the vicinity of the site and the drawing contained within Appendix A shows the location of parking restrictions within the site

environs, it can be seen that the majority of the parking within the area is resident permit parking only.

3.2.1 Central London Congestion Charging Zone (CLCCZ)

The development is within the CLCCZ which was introduced as a way of ensuring that those who use valuable and congested road space make a financial contribution to invest back into improving transport in London. It encourages use of other modes of transport and is also intended to ensure that, for those who have to use the roads, journey times are quicker and more reliable. The scheme requires drivers to pay £10 per day to drive in Central London during the scheme's hours of operation, which are between 07:00 and 18:00 Monday to Friday.

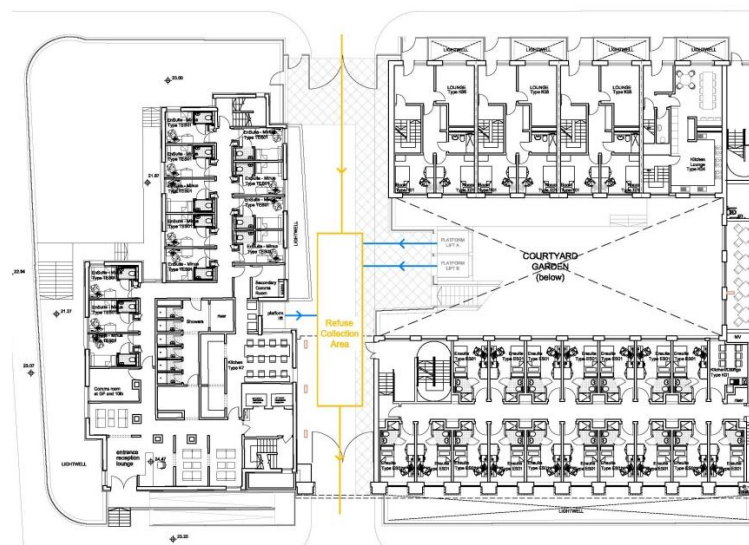
The current scope of the CLCCZ map can be viewed at www.tfl.gov.uk.

3.3 Proposed Access / Egress

Vehicular access to the development will be from Sandwich Street which will lead to the service area, providing access to the loading bay. Egress from the site will be provided onto Cartwright Gardens, creating a one way system on site.

Both the access and egress will be gated and controlled on-site to manage and minimise conflicts.

The following diagram show the ground floor layout and the service access road with direction of travel.



4. Delivery and Servicing Arrangements

UPP have work very closely with the Applicant to ensure that the impact to the environment from Facilities Management (FM) activities on site are managed, measured and controlled.

The TPC will have the overall responsibility for this DSMP. However, all staff involved in the ordering of goods for the site will be made aware of the Plan and required to act within the guidelines.

4.1 Servicing times and routes

The development will require a relatively low level of servicing activity, with the delivery and servicing procedures being appropriate to the scale and location of development, and it is expected to have a level of servicing activity similar to the existing activity.

As far as possible, service vehicles will be guided to access the buildings outside busy periods to reduce conflicts with other users of the site. The Applicant will encourage all deliveries to take place outside of the local highway network peak periods and in accordance with the local vehicle restrictions, as detailed above.

The Applicant will discourage deliveries on days of any special events, to minimise the traffic impact on the local highway network. The timings of most deliveries will be agreed in advance and the Applicant will encourage service providers to minimise the time taken to complete each delivery task.

The following table gives an indication of the expected deliveries and the likely frequencies.

Service area	Frequency and hours
Waste	Approximately 6 collections per week for waste collection (Mon - Fri)
Post / couriers	Throughout the day, (Mon – Sat)
General (including food)	Approximately 51 deliveries per week

4.2 External access arrangements

The proposed development will see the removal of the three existing service locations and a consolidated service yard. This arrangement will minimise delivery and service vehicles parking and reversing on Sandwich Street, as such, there should be no need for these vehicles to undertake any reverse manoeuvres within the area, thus reducing noise nuisance. The level of vehicular trips to Sandwich Street will be reduced as a result of the development and the internal service yard and waste storage areas will minimise the risk of odours from food waste.

Delivery and service vehicles will access to the site via Sandwich Street to the east of the building, and egress onto Cartwright Gardens. This service yard will be of sole use for the Halls and has been designed in accordance with LB Camden CPG7. Vehicle swept path analysis has been undertaken using a Phoenix 2-15W axle refuse vehicle (8.97m in length) to ensure that these vehicles can use the service area, the resultant drawings are contained within Appendix B to this Plan.

A direct route is provided into the building from the service yard, where access is provided, through the use of two service lifts, to the service area which is located on the lower ground floor. Staff using these two areas will be made aware of their responsibility to ensure waste is suitably bagged. This especially applies to catering staff, who will be required to adhere to legislation detailing the safe disposal of potentially unhygienic kitchen waste.

4.2.1 Waste Collections

UPP have reviewed the position and capacity of the bin stores to ensure that waste collections are of sufficient frequency and at times of day that avoid disturbance to local residents and avoid the risk of odours from food waste, see Appendix C.

Bins will be stored in an enclosed compound and collections will take place off road in the service yard.

Bin stores and the surrounding areas will be kept clear of debris by the dedicated janitor/caretakers and treated to deter environmental factors.

UPP has consistently demonstrated its commitment to protecting the environment and reducing the amount of waste output going to landfill and will continue to do so at the Gardens Halls. The proposed development encompasses the existing garden and it is proposed to compost all materials from the garden on site thus reducing waste from the site.

At the residential accommodation managed by UPP at Plymouth University, UPP has achieved recycling rates in excess of 60%. This level of recycling is considerably in excess of the targets set by the Government, which currently sets a target of 40% for recycling which rises to 50% by 2032 and UPP would hope to work towards achieving the same high levels at Cartwright Gardens.

It is envisaged that it will be the responsibility of individual students to take their own refuse from their rooms / apartments / clusters to the main bulk or secondary refuse stores at lower ground floor level. It will be the responsibility of the facilities management team to ensure that the stores are kept clean and empty bins made available.

The refuse will be collected from the main bulk store at lower ground level, transferred vertically by the operators / facilities management via the proposed external platform lifts and then transferred to the collection vehicle.

4.2.2 General Refuse Storage Strategy

Waste generated by students will be stored locally within each student room, apartment cluster or townhouse in designated refuse and recycling bins provided by the facilities management team.

There is no space allocation or intention for common refuse stores on the accommodation floors. All refuse will be removed from source and collected into one of three refuse stores at the lower ground level.

The three stores are located as follows:

- A primary bulk refuse store off the northern courtyard at lower ground level;
- A secondary refuse store at the base of Hughes Parry Tower serving its inhabitants; and
- A secondary refuse store located off the southern courtyard serving as temporary storage for the inhabitants of the townhouses to the southern end of Sandwich Street.

The primary bulk store provided within the main student accommodation building will house the vast majority of refuse as well as a small Eurobin Compactor. This central store will serve as the single point for the collection of refuse.

The secondary refuse store at the base of Hughes Parry Tower will act as a temporary store for the inhabitants of the tower, Facilities management will arrange the circulation of bins between this store and the main bulk store ensuring that ample space for waste is provided for the inhabitants of the tower.

The secondary refuse store located towards Leigh Street (at Lower ground level within the courtyard) is intended to act as a temporary holding store for the townhouses positioned to the south of the main building along Sandwich Street. This store is necessary to prevent day-to-day transfer of refuse through the canteen during operation hours. Full refuse bins collected within this area will be taken to the bulk store and empty bins circulated by facilities management out of hours.

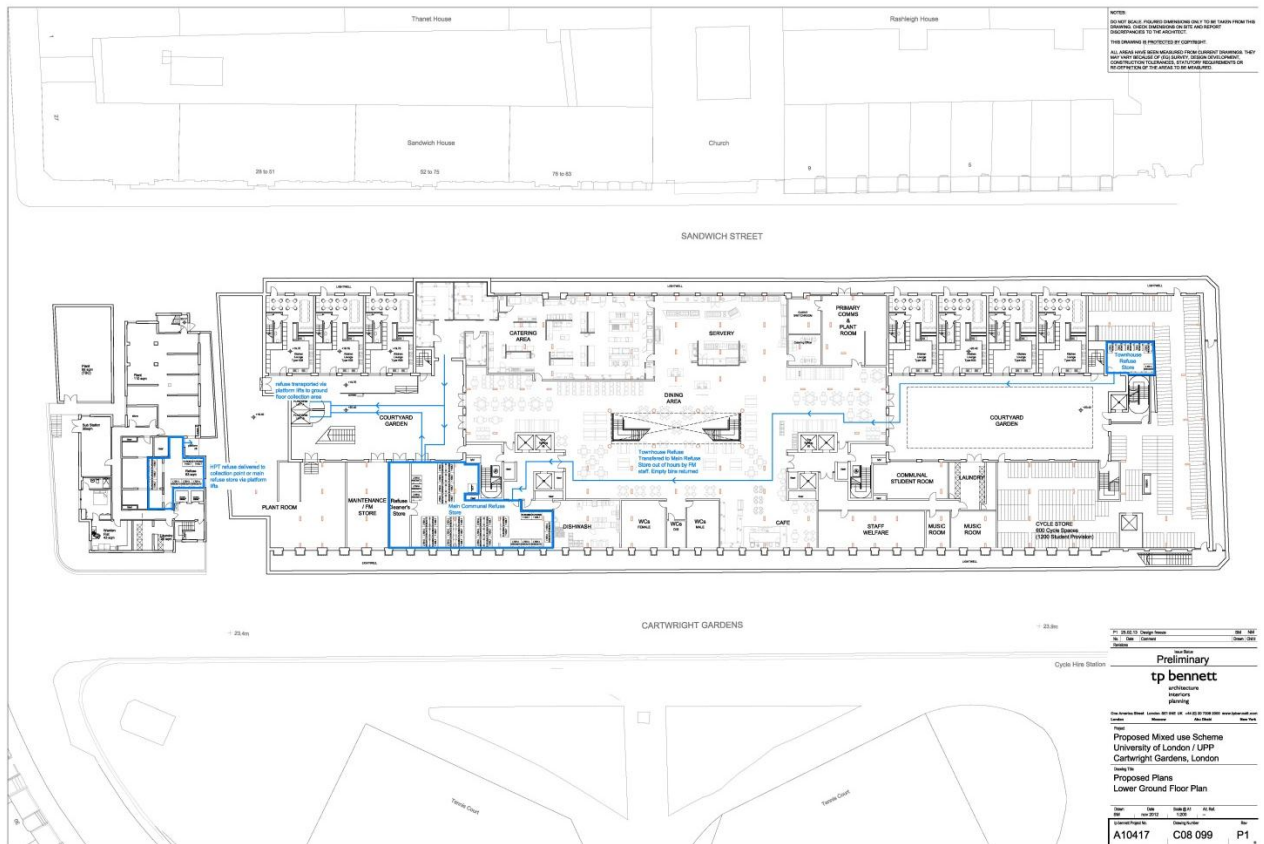
4.2.3 Kitchen deliveries

Deliveries to the kitchen will be made to the service area and the goods will be transferred internally to the kitchen.

The proposed redevelopment of Garden Halls has included for kitchen stores which have been designed to accommodate a greater storage of goods to those which currently exist. This is expected to reduce the number of catering deliveries to the proposed development.

4.3 Internal arrangements and routes to the service area

The following diagram shows the internal routes to the service areas.



4.4 Contractors

Only approved contractors will be allowed on-site. Such permission will be granted at the discretion of the caretaker, with no exceptions being granted.

Contractors will be advised to arrive and leave the site outside of peak hours wherever possible.

5. Monitoring and Review

To understand how deliveries are made to and from the site it is important to conduct regular surveys. The TPC will undertake detailed surveys of deliveries, an example form is attached in Appendix D to this Plan. This data will be used to inform any changes to this Plan.

Once the data has been collected it will be analysed to identify any trends. For example, if a supplier visits the site more than once per week, or that a number of different companies deliver similar products.

It is essential for the impacts of the Plan to be monitored to identify if individual aspects of the Plan are particularly successful or unsuccessful and to update the Plan if necessary.

5.1 Review of DSMP

It is intended that this will be a “living” document that will be reviewed and updated when necessary. The DSMP needs to be flexible with the ability to adapt to the challenging needs of the site. Monitoring the DSMP periodically is crucial in determining progress and for highlighting any changes required.

As mentioned above, surveys of deliveries to the site will be undertaken and analysed. The TPC will monitor and update the Plan accordingly. The TPC will also ensure that LB Camden are engaged in the process.

Any changes to the DSMP will be made available to all staff, with a copy of the revised full DSMP being available for viewing on site.

The TPC will maintain regular links with LB Camden regarding the DSMP and other road safety issues in and around the area of the site.

6. Action Plan

Below is an action plan to assist the TPC in delivering the Plan.

Actions	Person Responsible	Date
Make DSMP available to staff	TPC	Prior to occupation
Reduce or consolidate the number of suppliers	UPP	Prior to occupation
Inform suppliers of the delivery location	TPC	Prior to their first visit to the site
Carry out data collection for one full month	TPC	Within 6 months of occupation of new development, then once per year
Consider the implementation of a delivery booking system	UPP	Within 12 months of occupation of new development
Update DSMP following data collection	TPC	Within 12 months of occupation of new development, then once per year if necessary

7. Conclusion

This DSMP contributes to balancing management of the economic, social and environmental issues affecting freight transport in London.

Regular delivery activities will be agreed in advance with UPP and they will be responsible for the implementation of this strategy.

Deliveries will be encouraged to take place outside the peak traffic times and in accordance with the local traffic restrictions.



Refuse collection will follow a similar regular arrangement, and will adhere to the delivery protocol stated in this strategy.

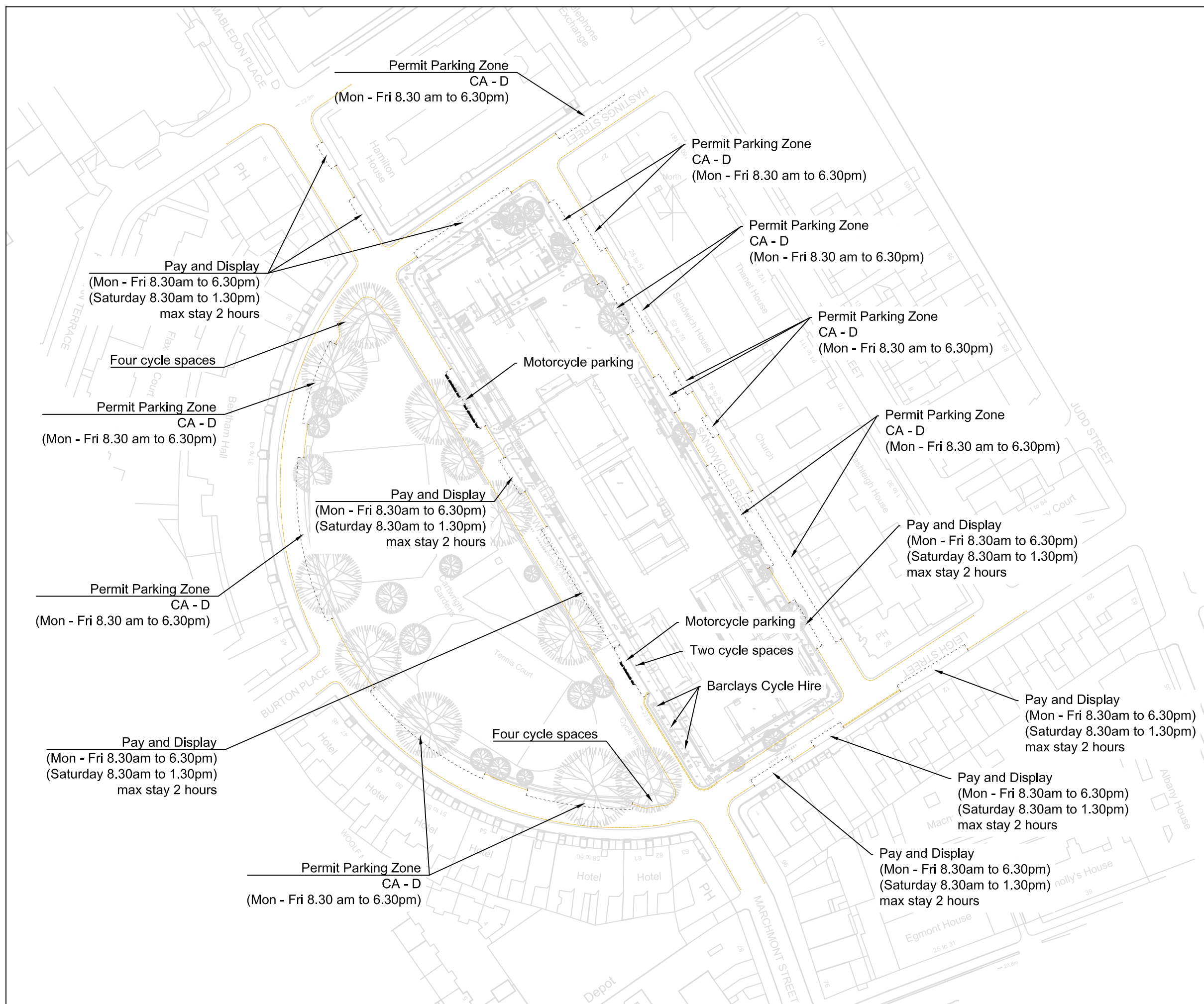
Most delivery activities will have been agreed in advance with the Halls.

Appendix A

NOTES

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-  PARKING SPACE
-  Double Yellow Line
-  Single Yellow Line



Issue	Date	Description	By	Chkd	Verfd
A	21.01.12	BARCLAYS CYCLE HIRE ADDED	AD	TC	-
	21.09.12	ORIGINAL ISSUE	AD	TC	-

Project Garden Halls, Cartwright Gardens, London – Student Accommodation
 Client University of London
 Architect -

Job No. 1004327
 Scale -
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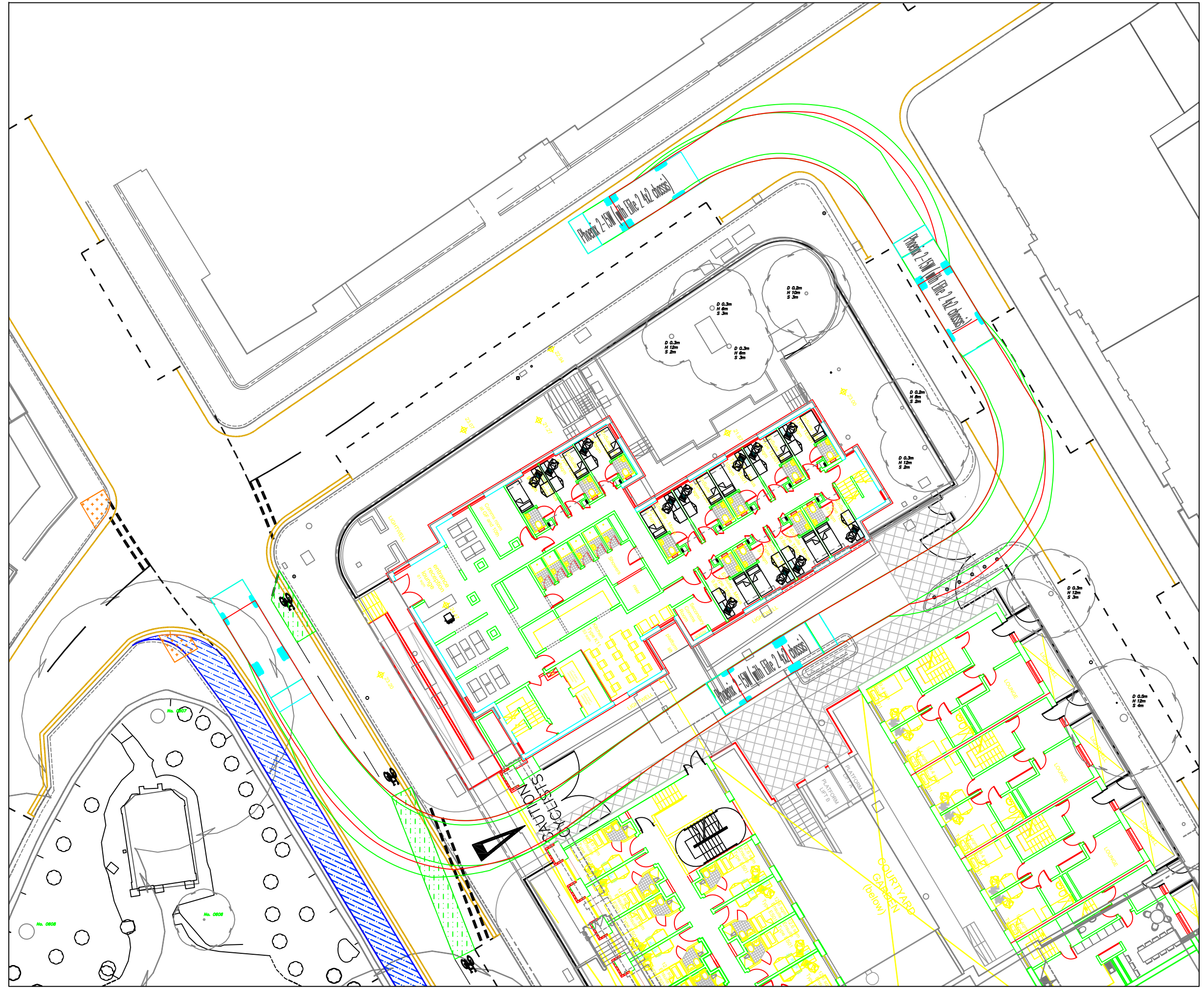
Title Existing Waiting and Parking Restrictions

Drawing Number 1004327-TC-003
 Iss. A

Appendix B

NOTES
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Phoenix 2-15W (with Elite 2 4x2 chassis)
 Overall Length 8.970m
 Overall Width 2.530m
 Overall Body Height 2.211m
 Min Body Ground Clearance 0.416m
 Track Width 2.530m
 Lock to Lock Time 4.00s
 Kerb to Kerb Turning Radius 7.850m



Issue	Date	Description	By	Chkd	Verfd
F	13.03.13	REVISED OFF SITE HIGHWAYS PROPOSALS	AD	TC	-
E	27.02.13	UPDATE SITE LAYOUT CO8-100P1	AD	TC	-
D	07.02.13	SMALLER REFUSE VEHICLE AND UPDATED TRACKING	AD	TC	-
C	01.02.13	NEW SITE LAYOUT AND TRACKING	AD	TC	-
B	17.01.13	NEW SITE LAYOUT AND TRACKING	AD	TC	-
A	10.12.12	NEW SITE LAYOUT AND TRACKING	AD	TC	-
	03.11.12	ORIGINAL ISSUE	AD	TC	-

Project Garden Halls, Cartwright Gardens, London – Student Accommodation
 Client University of London
 Architect -

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Title
 Vehicle Swept Path Analysis
 Refuse Vehicle

Drawing Number 1004327-TC-002
 Iss. F

Appendix C

Waste and Servicing

Introduction

UPP manages in excess of 28,000 student bedrooms across England and is able to use this experience in the development of effective and bespoke waste management plans for each of our sites.

We will work very closely with the University of London, and the University's caterers to ensure that the impact to the environment from FM activities on site are managed, measured and controlled. This will include student waste awareness campaigns and competitions.

As an environmentally responsible organisation, UPP promote the principle of maximising recycling. Our site specific solutions for waste management take this into consideration:

- legislative compliance
- reductions in waste to landfill
- staff and student expectations

It is a stated aim of UPP's Sustainability and Environmental Strategy to systematically reduce resource consumption through best practice environmental management and cultural change.

Experience

UPP has achieved high levels of recycled waste at many of its student accommodation projects.

Using experience from our existing operations, UPP will work with the University to review the current Waste Management Strategy, and identify where improvements can be made and the benefits the changes would bring.

This Waste Management Strategy will inform the evolution of the on-going waste and recycling provisions at the site.

Council Guidance and Policy

We have incorporated development policy guidance provided by Camden Council into the production of our waste management strategy for the estate in particular Policies DP20 – *Movement of goods and materials* and DP26 – *Managing the impact of the development on occupiers and neighbours*.

Swept Paths

UPP's grounds and caretaking team will ensure that windborne litter is removed from the perimeter of the site and the gardens sweeping paths on a regular basis.

Demarcation

Servicing bays will be accessed by a service lift and will not have direct vehicle access to the waste collection point level so as to remove the risk of them being misused for car parking or storage.

Pedestrians

Safe segregated routes will be provided for pedestrians walking through the service road between Cartwright Gardens and Sandwich Street. Adequate visibility for vehicles emerging from this service road has been allowed for within our designs enabling a clear and unobstructed view of, and by pedestrians, cyclists and other road users.

Access Roads

The service road has an in/out configuration which means there will be no need to vehicles to reverse; in fact this will be prohibited. A one way system will be created between Hughes Parry Tower and the Gardens Halls to provide access for service vehicles this will remove the need for on road loading and unloading or parking as well as removing the need and noise of waste collection vehicles having to reverse.

Headroom

We have allowed in excess of the 3.5 m required for headroom for goods vehicles and sufficient for the access and egress of waste collection vehicles.

Separation of waste and recycling

The separation of general waste from recyclable material will be undertaken by students at source. Kitchens and Central Collection Points will be provided with containers for general waste and three compartment recycling bins which allow separation of materials.

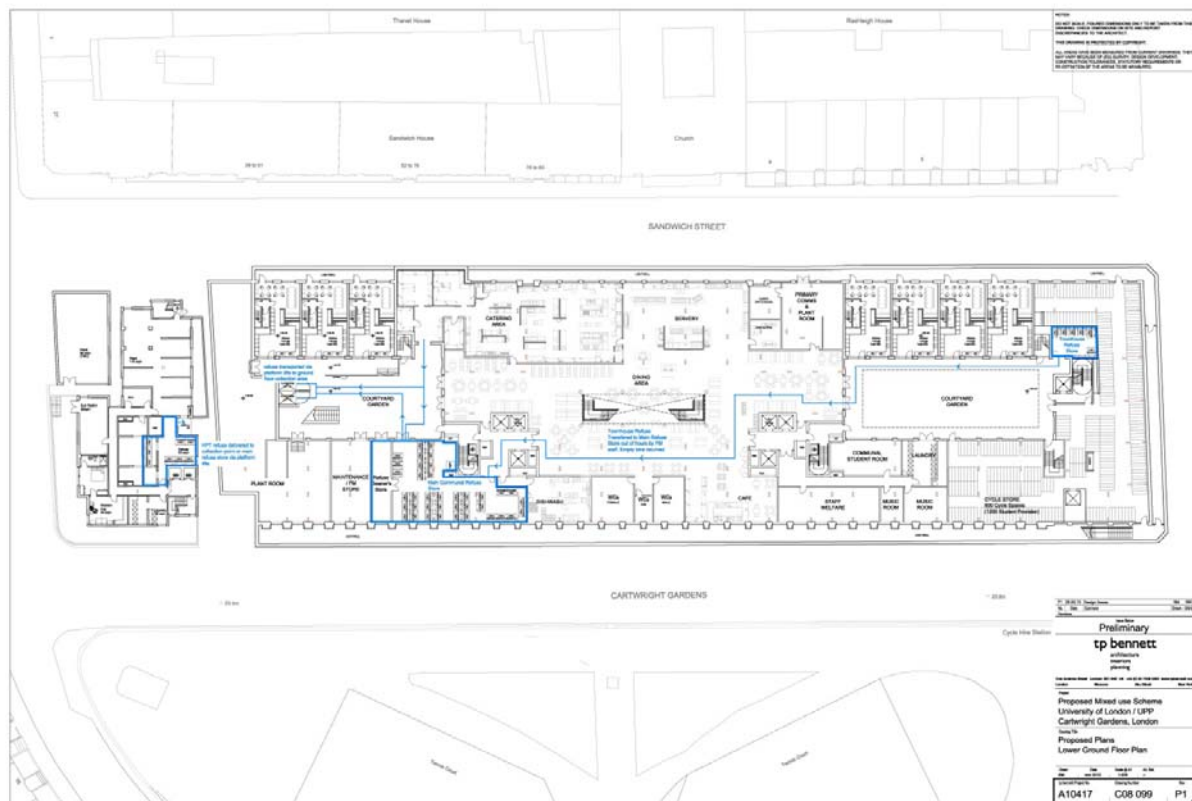
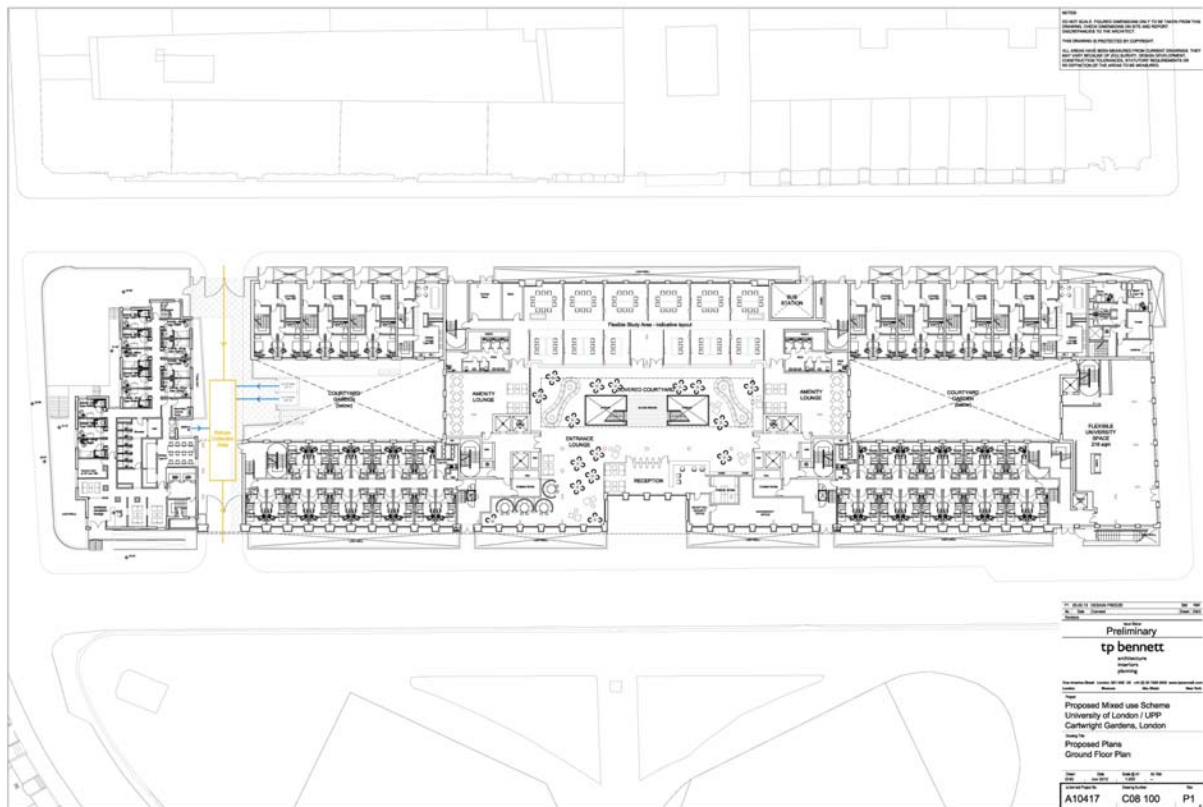
The provisions will allow for recycling of paper, card, plastic containers and bottles, foil containers, newspapers, magazines, drinks cans and food tins. Waste and recycling is collected in colour coded bins. Glass is collected separately with a dedicated collection point.

The waste contractors can collect 'difficult' waste such as waste electrical and electronic equipment, by arrangement with UPP management using specialist licenced waste transporters.

UPP arrange collections by local hospices and the British Heart Foundation for items left over by students at the end of the year, including bedding, pots and pans and non-perishable foodstuffs.

Refuse and recycling will be taken to the central collection points by the students.

The refuse and recycling will be delivered to the bin store and deposited in 1100 litre Eurobins in a secure area. The Eurobins will be colour-coded to indicate refuse or recyclable material. Waste contractors will collect waste and recycling from the centralised bin store managed by UPP's janitorial staff. There will be regular litter picking in and around the site to ensure that walkways and other areas remain free from debris.



We have allowed for the provision of 30 x 1100 litre Eurobins which will we anticipate will require collection three times each a week. A further waste point will be provided adjoining the sandwich street townhouses for use by residents in that area of the building waste from this point will be collected and taken to the main waste collection area daily by the UPP cleaning staff in lidded wheel

bins along a route through the lower ground floor of the building. This will ensure that local residents are not disturbed by collections from this point.

Residents of the tower will have a separate waste collection point at the base of the tower.

UPP staff will ensure that the Eurobins are rotated on a daily basis to ensure that the bins nearest the door do not become overfilled.

Information about the recycling strategy and waste collection plan is included in the welcome pack that students receive when moving into the residences. The message to recycle is reinforced using information posters displayed in the communal kitchens, including details of which type of waste goes in each recycling bin. At the end of the year, additional provisions will be made for the collection of waste and recycling, in the form of additional pickups from site to accommodate the increase in waste streams.

Waste volume calculations

The provision of central bin storage is calculated on the basis of a maximum of 75 litres of waste and recycling generated by each student per week.

Initially the proportion of waste to recycling bins will be split approximately 50 / 50 on installation with further refinement of these proportions based on monitoring the levels of waste and adjusting the provision to suit the volumes produced.

Through arrangement with the waste contractor the number of lifts per type of recycled material can be varied to suit production on site.










Waste collections

UPP have designed the position and capacity of the bin stores to enable us to ensure that waste collections are of sufficient frequency and at times of day that avoid disturbance to neighbours and avoid the risk of odours from food waste. Bins will be stored in an enclosed compound. Collections will take place off road in a designated service area. Bin stores and the surrounding areas will be kept clear of debris by our dedicated janitor/caretakers and treated to minimise the risk from environmental issues such as vermin infestation.

UPP has consistently demonstrated its commitment to protecting the environment and reducing the amount of waste output going to landfill and will continue to do so at the Garden Halls.

At the residential accommodation managed by UPP at Plymouth University, UPP has achieved recycling rates in excess of 60%. This level of recycling is considerably in excess of the targets set by the Government, which currently sets a target of 40% for recycling which rises to 50% by 2032 and we would hope to work towards achieving the same high recycle rate at Cartwright Gardens.

Appendix D

Type of Vehicle		Picture	Type of Vehicle	Picture
A	Transit Van		F	4-Axle Truck 
B	7.5T Luton		G	4-Axle Front Loader 
C	Truck		H	Small Van 
D	3-Axle Truck		I	Large Van 
E	Skip Type Truck		J	Truck 