

# **Construction Logistics**

# **Operational Services Document**

Version 1.2

# **Document Control**

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# 1. Executive Summary

University College London (UCL) has appointed Wilson James as the Construction Logistics Partner and they will start mobilising on the 11<sup>th</sup> August 2014. The primary focus of activity will be in the central campus area (known as the Bloomsbury Campus) – where the majority of capital investment and EM& I projects will be delivered – though in due course many principals and arrangements may extend to more remote (satellite) properties in other parts of central London with emphasis on delivering a consistent standard. The following types of project have been taken into account for this Logistics document and these include:

- 1. Capital Projects
- 2. EM&I Projects
- 3. Minor Works
- 4. Quick Wins

Multiple projects being undertaken in the central campus create significant additional risk if uncontrolled to the university's business as usual activities for example:

- The safety of students, staff and the general public in and around the University estate.
- Disruption to 'business as usual' teaching, research, public events, supply chains and other University activities.
- Confusion caused by changes to pedestrian and vehicle access and circulation routes into and around the campus.

Wilson James activities will be fundamental in reducing safety concerns and managing any conflicts within the space outside of individual construction site boundaries which would become overwhelmed with individual project movements and activity if left without central control.

UCL also recognises the potential cost saving that can be achieved from centralising the control of certain activities, such as waste through one provider. The proposed use of consolidation services for palletised material deliveries will benefit the University by using more efficient and sustainable methods of transport operations and reducing vehicular movements.

The need to control Construction Logistics becomes apparent on entering the campus with current business as usual activities displaying frenetic activity in addition to the delivery of a major capital projects programme. Safe and efficient Construction Logistics in collaboration with business as usual will deliver a safe and efficient solution. The UCL Estates acknowledge that Construction Logistics is essentially a skilled discipline working side-by-side to the Business as Usual and that specialist knowledge is required to facilitate success.

# 2. Glossary

- UCL University College London
- LM Logistics Manager (UCL)
- LP Logistics Provider (Wilson James)
- LZ Logistics Zone
- COSHH Control of Substances Hazardous to Health
- REL Rear End Loader (Type of Waste Disposal Vehicle)
- OOG Out of Gauge
- FOD Foreign Object Debris (uncontrolled loose waste)
- DMS Delivery Management System
- BAU Business As Usual
- AIL Abnormal Indivisible Load
- EM&I Electrical Mechanical and Infrastructure
- PSO Portfolio Services Office
- PO Project Officer
- ER's Employers Requirements
- LCCC London Construction Consolidation Centre
- TMP- Traffic Management Plan

# 3. Purpose of document

The purpose of this document is to provide enough detail to get a full understanding of how the Operational Services that Wilson James provide will combine into the project and contractor procedures. It is written in support of the original Logistics Strategy that University College London has adopted for its construction projects. This document will be used as part of a wider package of information controlling Construction, Logistical and Business as usual functions:

- Construction Management Plan
- UCL Logistics Strategy
- Operational Services Document
- Employers Requirements (Contractual Content)
- Logistics Information pack (Training Pack)
- UCL Traffic Management Plan
- UCL Security Assignment Instructions

It is essentially for the Estates Department and contractors and will add clarity to the employer's requirements (ER's) incorporated within the contracts. Wilson James will seek to consolidate a list of all contractors and will utilise all means but essentially be seeking information from Project officers for contact details.

The headings in this document identify the mandated and collaborative services that UCL Estates have approved and which Wilson James will implement and maintain. This Operational Services Document will be cascaded to UCL Estates team including framework contractors, Principle Contractors and Sub Contractors during the initial mobilisation of Logistics and then at the start of projects and during the tender process.

In addition to this Operational Services Document a Logistics information pack will be provided to all appointed contractors and act as a training guide for these services. Wilson James will also be included in prestart arrangements and project meetings as agreed with the UCL Project Officers. Logistics briefings will be compulsory for each individual project start up regardless of a contractors being awarded more than one project.

This document refers to the central campus projects that fall within the template at (Annex A); however the projects falling outside of this area will at a later stage be subject to the same conditions.

Wilson James will assist in facilitating these additional requirements if UCL approves expansion of the geographic zone beyond the central campus area.

UCL maintains a Project Portfolio containing information about all anticipated programme activity. The information in this portfolio will be merged with actual data passed to UCL by the Logistics provider. Estates will then use this material for future projects providing greater accuracy in the early stages.

The University will be fully operational during the construction phases and the Logistics provider is fully responsible for providing a service within the "Shared Space" outside of any contractor works – this will be to deliver or manage the following mandated services for each project:

- 1. Material deliveries to the site boundary
- 2. Centralised construction waste disposal
- 3. Construction works way finding and temporary alterations to Campus way finding or information.
- 4. External/ Internals site hoarding (where appropriate) including working with the branding supplier and removing any branding for re use.

This document details the requirement of each of these services and each contractor will be informed of the mandatory standard to be adhered too.

# 4. Material Deliveries

#### General

UCL Estates mandate the use of a Delivery Management System (DMS) for construction deliveries covering Capital Construction Projects, EM&I, Minor Works and Quick Wins. The DMS divides scheduled deliveries into three types:

- Consolidated Loads -Palletised Goods
- Direct Deliveries indivisible loads, fragile or specialist
- Small Tools and Parcels (STP)

In this document the DMS can also be referred to as Datascope, this is a web based portal available 24/7 and all contractors will receive access rights after receiving formal training from Wilson James. Datascope will have the ability to provide messages to contractors on the login screen – these will only allow access once they have been acknowledged and may include information about UCL Events/ Access restrictions etc.

All scheduled deliveries will utilise the Logistics Zone (LZ) at UCL in the area of Gordon Square (North) as a release point. The Logistics team will effectively manage the onward travel of construction vehicles or Materials into the central campus area using the VMS and collaboration with UCL Security. The materials will be delivered to a point of access to the site agreed between the Contractor and Logistics Team.

The main purpose of using the London Construction Consolidation Centre combined with the DMS is to reduce the impact from LGV's carrying palletised construction materials in the Camden Borough and specifically the Central Campus area. The ability to utilise the LCCC for storage also reduces the amount of materials that need to be stored on site.

Vehicles less than 3500kgs carrying small tools or parcels for construction will still be managed through the DMS ensuring they are scheduled. They will still be controlled at both the LZ and Security gates but it is unlikely they will use the LCCC.

Contractor's deliveries are scheduled for when the vehicles are to arrive at the LZ and not at the final destination. They will access the preferred Gate. Once the vehicle has arrived Wilson James will work with UCL Security, the UCL Traffic Management Plan (TMP) and the Vehicle Monitoring System (VMS) to forward vehicles to the correct gate when it is safe to allow access. The TMP for UCL dictates how many vehicles can safely operate within the campus areas and security manage this access using the VMS.

Wilson James will provide Traffic Marshalls to meet the vehicles at the access point once they have been released from the LZ. They will marshal the vehicle to its unloading point and ensure unloading operations are carried out safely.

Where possible the marshals will also assist with Business as Usual deliveries

Wilson James is providing the use of a consolidation centre in Silvertown known as the London Construction Consolidation Centre (LCCC) and it is located approximately 10 miles to the South East of Gordon Square

The full postal address is

London Construction Consolidation Centre Thames Road Silvertown E16 2EZ

The contact number is 0207 474 7412





The LCCC is a secure warehouse that is used to receive materials from contractor's suppliers. Vehicles use the scheduling system to book materials into the LCCC and they can use it to store materials free of charge for up to 21 days. The LCCC uses a FORS Gold registered fleet of vehicles to deliver the consolidated materials to the LZ in line with contractor's requests.

The diagram below explains the consolidation and direct delivery process



#### **Consolidated Deliveries**

Consolidation provides the following advantages to UCL and contractors

- The ability to maintain an orderly site clear of materials working with the right items at the right time.
- The ability to purchase in bulk high demand materials and store them free of charge for set periods calling to site the amount you need when you need it.
- Reductions of up to 70% in vehicle movements on site with all the associated safety and environmental impacts that accompany this.
- Safe vehicle operations by operator whose drivers and fleet meet the FORS Gold Standard.

Consolidation process assists the contractor to plan his materials required to deliver his programme of works. It allows him to have confidence that materials he has in storage at the consolidation centre will be delivered to his site on the day he books them.

The high level process for contractors is broken down into five elements:

- 1. Contractor books materials for project to be delivered to the LCCC
- 2. Monitoring Material levels in storage
- 3. Book material from consolidation to site
- 4. Receipt materials on site
- 5. Book return journey for materials back to LCCC

Consolidation will be the default process for all deliveries unless approved by the UCL Logistics team for following another process. Consolidation needs the contractor to plan his workload and recognise the timings for getting materials to site. It is not a reactive process and will take contractors little time to become familiar with the process.

The term D is to define the working **D**ay, this may be the booking day or the day that the materials will be received at either the LCCC or LZ. Materials arriving at the LZ can be expected to arrive at the site during the same day. It is advised that contractors plan to use this material the following day.

All materials arriving at the site must have someone from the project to check them and sign for the delivery. Availability will be confirmed before the materials leave the LZ and utilise the contact details entered onto Datascope.

#### **Material Condition**

Wilson James will review materials when they arrive at the LCCC for damage. Where damage is identified the contractor will be notified through Datascope and images will be obtained and included in the communication. The contractor can then make the decision to abort the delivery and send the materials back to the supplier, store the materials for further inspection or continue deliver the materials to site.

Where materials in crates/ packaging are not visible then Wilson James will review the packaging only and report on any damage to the packaging and will not be responsible for the materials inside. In these instances and where high value or extended replacement times are involved Wilson James advise the contractor to be present at the LCCC on arrival of the materials to check and receipt.

When consolidated materials arrive at the LZ and are unloaded the same principles apply, pre reported information damage will be available and further damage to the visible packaging or materials will be reported.

Materials subject to damage from inclement weather must be packaged by the supplier appropriately. If the materials scheduled are not packaged to prevent damage form the weather then the contractor will be informed and action can be agreed.

An approved contractor's representative must be available to receipt the materials on the day they are delivered to site. If the approved person is not available the material's will not be delivered and remain in the LZ or at the LCCC.

The LCCC offers dry secure storage and can be reviewed by UCL or its contractors at any time for suitability. Materials requiring specialist storage conditions or have a high individual value > 200k must be notified to the LCCC.

#### Booking Materials into the LCCC from the Supplier

The Contractor will order materials from his supplier informing them of the LCCC delivery location. He will then put the delivery date and time into the Datascope system using the scheduler to arrange the most convenient available unloading slot with their supplier.

The LCCC is available for receiving materials between Mon – Fri 0800hrs – 1700hrs

Provision can be made by special arrangements outside of these hours.

The simplified timeline is as follows:

Notified of Delivery by 1400hrs D-1	Storage period (free of charge for D + 20 days)	Chargeable	
			-

Datascope will allow the contractor to book material deliveries into the LCCC up to 1400hrs on the previous working day. Deliveries due on a Monday must be booked by 1400hrs the previous Friday (Thursday if there is a Bank Holiday).

The vehicle is expected to turn up at the LCCC within 15 minutes of its booking time and will be unloaded within 5 minutes of the original booking time. Delays may occur where the vehicle arrives later than 15 minutes past the booked time where upon an agreed time for off load will be agreed by the LCCC

The contractor will be informed through Datascope when the delivery has arrived and all contractors have the opportunity to be present when the materials arrive for inspection if required.

#### Storage at the LCCC

The LCCC will allow contractors up to 21 days free storage from the date their materials arrive and are unloaded.

Contractors will be able to view their stock holding through the Datascope portal. The Contractor is responsible for identifying each material by name or code and Datascope and the LCCC will only refer to this information for selecting materials.

Stock may be split down at the LCCC and delivered separately but the contractor is responsible for breaking the pallet down and informing the LCCC so that stock levels can be adjusted on Datascope.

Datascope will warn contractors of the expiry period from the 7 day point. This will also be flagged to the UCL project manager if the details have been entered. The UCL Project Manager will be invoiced for periods of storage past the 21 day point at £7 per pallet per week.

The term Pallet is recognised as a 1200mm x 800mm area. Materials that overhang the standard pallet size or larger pallets will have an increment applied and this is known as the Pallet Equivalent.

Pallet height should be notified if it exceeds 1800mm, pallets/ materials that are deemed to be unstable or in a dangerous condition will not be unloaded and the contractor informed.

Datascope will require the Pallet or Pallet equivalent size entered as mandatory information, this will be confirmed when it arrives at the LCCC. Variations will be agreed with the contractor.

Contractors will be able to visit the LCCC at any time during normal working hours Monday to Friday 0800hrs – 1700hrs. Pre booking is required and 5 point PPE is mandatory for access to the warehouse area (Hard Hat, Protective Glasses, Gloves, Hi Visibility Vest, and Protective boots)

#### Booking Materials from the LCCC to Site

Contractors will book their palletised materials to site using Datascope. In the same way that they select the LCCC option there is an option to select deliver from LCCC to site. The simplified timeline is as follows:

Notified by 1400hrs D-2	D-1 Product picked and consolidated	D day arrive at LZ- Delivered to Site
$\longrightarrow$		

Datascope will enforce this timeline, it should be noted that there are a fixed number of consolidated deliveries each day (normally up to 4) and once these are full the contractor will have to select another date. Predictions of palletised deliveries identify that 4 journeys will meet the normal expected requirement.

UCL has traffic Management Plan (TMP) that restricts the numbers of vehicles accessing site through any gate in any one hour. These deliveries generally have a 30 minute period to carryout unloading unless extensions are authorised. The TMP allows campus security to control the quantities and types of vehicle requiring access. The Logistics team will provide a daily schedule of expected delivery vehicles and times to security and utilise the Vehicle Monitoring System (VMS) and radios to establish free space in the unloading areas.

When a consolidated delivery arrives at the LZ the time will be recorded and the consolidated materials will normally be unloaded, temporarily stacked and then taken onto site using 3500kg vehicles to the various sites scheduled for them. The onward delivery to site will always be initiated by communication with the contractor identified on Datascope. Where a consolidated vehicle load is for one or more sites in the same location there may be opportunity to take the vehicle onto site to one unloading area negating the need for double handling.

Consolidated vehicles arriving on time at the LZ will be pre booked and get priority for access as they will need to return to the LCCC for re loading.

#### **Direct Deliveries**

Direct deliveries are made in the same timeline as bookings into the LCCC, this is by 1400hrs the previous working day for receipt on site during the following working day.

#### Notified of Delivery by 1400hrs D-1

Contractors that have vehicles less than 3500kgs with small tools or parcel deliveries or have indivisible loads such as concrete, aggregate or loads that are perishable can use the direct to site option.

If this option is selected for loads that can be consolidated they will be refused using the approvals process.

#### **Delivery Approval**

All site deliveries booked on Datascope are managed by the system administrator and subject to the approvals process. This will confirm that your delivery can be processed in line with your request. There are 3 responses and you will receive one of these via the email contact submitted during Login registration.

The options are

- 1. Approved your method and timings have been accepted and your delivery must arrive at the LZ at the scheduled time.
- 2. Rejected and advised your method or scheduled time/ date are not approved and options are provided for alternatives or further information is required.
- 3. Rejected your method or timings have been rejected please re schedule your delivery.

#### **Construction Vehicle Transit Routes**

All contractors will agree to inform their suppliers about the agreed routes the delivery agents must take to get to the UCL LZ. The DMS will provide a mandatory acceptance process, information and maps for the contractor to send to their suppliers.

All construction vehicles using the DMS will be routed from the Euston Road into Upper Woburn Place turn right into Tavistock Square and be met by Marshals at the holding area in Endsleigh Place until they are released to site.

Vehicles exiting are also to use a pre-determined route found on the DMS information.

The routes are identified at Annex B.

### 5. Construction Waste

UCL Logistics will provide predicted waste outputs from the Project Portfolio information and pass this to Wilson James who will resource to meet the demands. Wilson James will manage the construction waste disposal process and provide the actual waste production information back to UCL so that future waste predictions can have more accuracy.

Wilson James have been contracted to work with the incumbent UCL waste contractor that is managed through a contract with O&G. Wilson James will effectively manage a process that allows contractors waste arising to be placed into receptacles –measured and disposed of ensuring ownership of waste transfer happens at each stage.

Where demolition activities take place each main contractor must provide their own disposal methods for waste produced. It is essential to monitor all UCL Construction vehicle activity and use of DMS is mandated for all construction vehicles (including demolition) and where they may interfere directly the Logistics Team will provide safe access to the agreed loading area. Demolition companies will not be able to utilise the Wilson James construction waste processes unless they can provide evidence that the waste arising will be suitable for the process.

The method of operation for construction waste will be independent of the UCL business operation and will not interfere with any existing UCL waste transfer methods. Wilson James will provide close liaison with UCL soft services through their management team to ensure that any potential conflicts are resolved and BAU is not impaired.

Skips and wheeled bins will be predominantly used for waste arising from projects. Wheeled bins will take preference over skips as this will further reduce vehicle numbers and improve space availability. Wheeled bins will be purchased for the transformation programme. Spare bins for exchange will be stored at the LZ and 140 Hampstead Road.

The waste process will allow the contractor to inform the Logistics team how many and type of receptacles it requires to place waste into. Each project will be able to "Call Off" waste from their site using a request form emailed or passed to the Logistics team. The Call Off will inform Logistics of the project number the quantity and type of construction waste arising. It will identify when they want it collected and request an exchange of bins if required, effectively maintaining a level of bins on-site under project control.

Once the waste has been collected it will be subject to 2 methods of disposal:

- 1. General Construction Waste acceptable to Rear End Loading/ Skip Vehicle
- 2. Coshh, Out of Gauge (OOG) General Construction Waste

Once a project has submitted a waste request the Logistics team will agree the timings for either collection or exchange of bins or to bring the REL to the proximity of the site and empty and return the bins. The Project must ensure that bins for collection/ exchange are available at the agreed time at an agreed safe area and will not be left in the public domain. It is important that Wheeled Bins are filled allowing the tops to close and do not exceed a weight of 150Kgs to reduce the likelihood of injury during manual handling operations. Bins found to be outside of these conditions will not be collected or exchanged until corrected by the contractor. Where the project is not accessible by the waste vehicles Wilson James will collect the full bins and transfer them to an approved stacking area commonly known as a corral. These areas will be created by Wilson James and will be secure compounds. They will be strategically positioned to minimise handling and allow for quick transfer to an REL. The corrals may also store empty bins ready to be returned to project areas.

Wilson James will be responsible for administering the booking of waste disposal vehicles and including them on Datascope. The Logistics team will meet each waste vehicle and ensure that only the suitable construction

waste is transferred and signing the transfer notes. Each projects general construction waste will be accounted for separately by identifying its weight and providing an individual transfer note.

Construction waste that does not meet the operating requirements of the REL will be classified as OOG. This waste will be itemised and weighed or estimated by the Logistics team and placed into a skip – normally located in the LZ. Individual projects OOG waste will be added to their total.

Where waste items are classified as Coshh the process shall follow the same format. Coshh waste will be placed in a different coloured receptacle and each different item must have safety data sheet provided by the contractor. This waste will then be transferred to the LZ where it will be placed into suitable containers awaiting technical disposal. The quantities and types of products will be measured to provide benchmarks for future transforming projects.

Wilson James will ensure the safe timing and routing of Waste movements around site, collaborative storage of waste with UCL and provide a safe means of loading skips at the LOZ.

Wilson James will provide all waste data to UCL Logistics.

# 6. Hoarding

The multiple project sites at UCL will benefit from standard external and internal hoardings. Wilson James has agreed to install Hoarding where appropriate but it is recognised that certain projects may review the risk of liability too high and will instruct the Principle Contractor to meet the specification.

Wilson James will provide the standard hoarding specification for UCL to approve and this will assist in providing the standard and form part of the ER's.

Hoarding may be subject to the application of Transformation branding in the form of lightweight bonded panels being applied. The project will be responsible for the costs of this branding and the communications team will arrange the panels to be manufactured. The Logistics team will be tasked with removing the panels on project completion in such a way that they can be stored and re used.

Wilson James will also provide temporary construction related way finding across the campus. This may include information regarding:

- Fire route changes
- Assembly Point Changes
- Temporary route changes to Campus facilities or project sites.
- Welfare signs







Logistics Plan - Traffic Management \_Option A