Construction Management Plan UCL New Student Centre

pro forma v2.0

Camden

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Review

For Internal use only

Please initial and date in the relevant section of the table.

The **highlighted areas** of the Draft table will be deleted by their respective teams during pre app review if these sections are no longer applicable.

Pre app

Community liaison	
CLOCS	
Transport	
Highways	
Parking	
Environmental health	
Sustainability	*(attach appendix if necessary)*
Sign off	

Draft

Community liaison	
CLOCS	
Transport	
Highways	
Parking	
Environmental health	
Sustainability	
Sign off	

- INDICATES INPUT REQUIREMENT FROM MULTIPLE TEAMS THROUGHOUT DOCUMENT

Introduction

The purpose of the **Construction Management Plan (CMP)** is to help developers to minimise construction impacts, and relates to both on site activity and the transport arrangements for vehicles servicing the site.

It is intended to be a live document whereby different stages will be completed and submitted for application as the development progresses.

The completed and signed CMP must address the way in which any impacts associated with the proposed works, and any **cumulative impacts of other nearby construction sites**, will be mitigated and managed. The level of detail required in a CMP will depend on the scale and kind of development. Further policy guidance is set out in Camden Planning Guidance **(CPG)** 6: Amenity and **(CPG)** 8: Planning Obligations.

This CMP follows the best practice guidelines as described in Transport for London's (TfL's Standard for Construction Logistics and Cyclist Safety (**CLOCS**) scheme) and Camden's Minimum Requirements for Building Construction **(CMRBC)**.

The approved contents of this CMP must be complied with unless otherwise agreed with the Council in writing. The project manager shall work with the Council to review this CMP if problems arise in relation to the construction of the development. Any future revised plan must also be approved by the Council and complied with thereafter.

It should be noted that any agreed CMP does not prejudice or override the need to obtain any separate consents or approvals such as for road closures or hoarding licences.

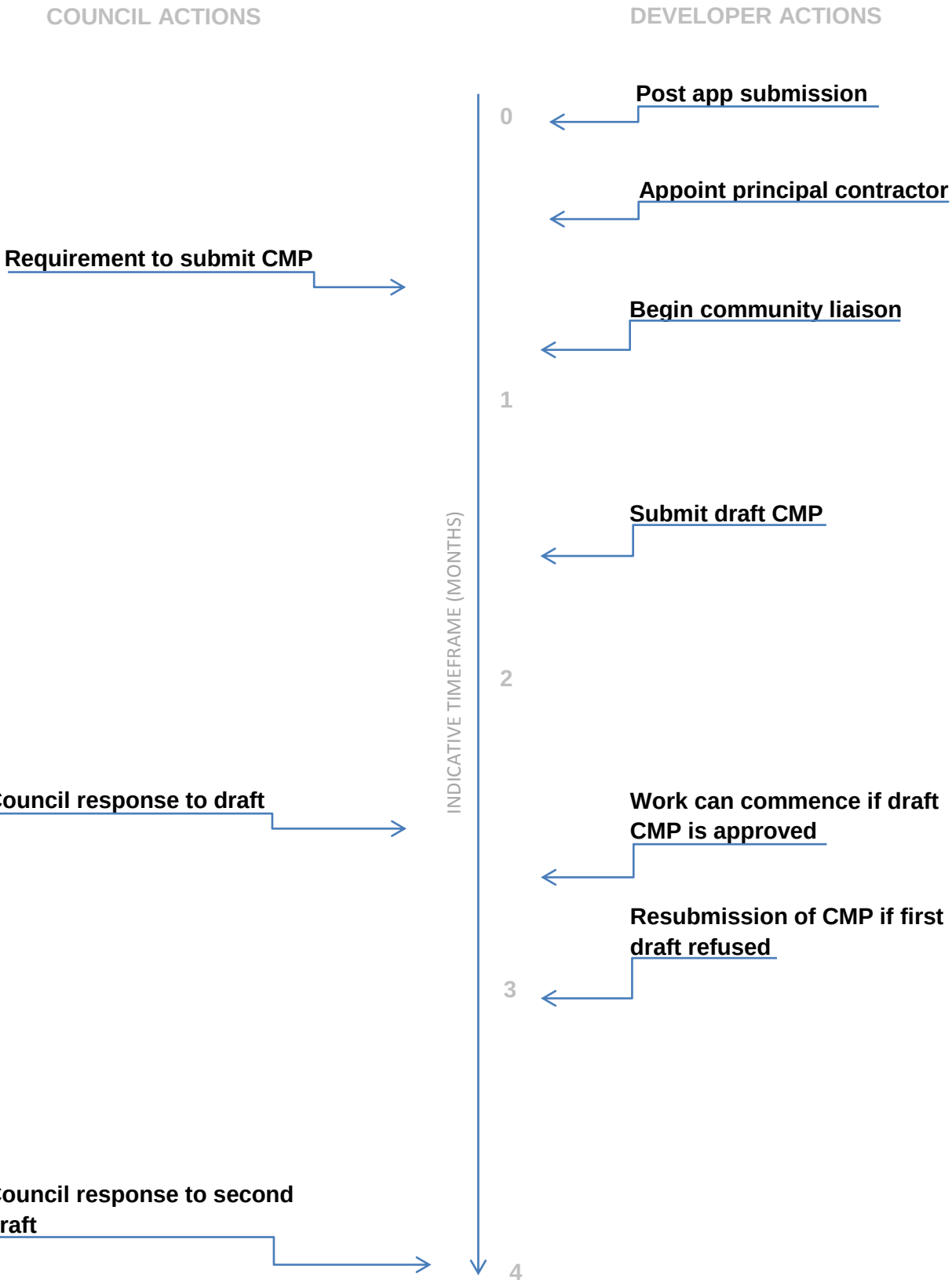
If your scheme involves any demolition, you need to make an application to the Council's Building Control Service. Please complete the "**Demolition Notice**"

Please complete the questions below with additional sheets, drawings and plans as required. The boxes will expand to accommodate the information provided, so please provide as much information as is necessary. It is preferable if this document is completed electronically and submitted as a Word file to allow comments to be easily documented.

(Note the term 'vehicles' used in this document refers to all vehicles associated with the implementation of the development, e.g. demolition, site clearance, delivery of plant & materials, construction, etc.)

Revisions to this document may take place periodically.

Timeframe


COUNCIL ACTIONS
DEVELOPER ACTIONS
Post app submission
0
Appoint principal contractor
Requirement to submit CMP
Begin community liaison
1
Submit draft CMP
INDICATIVE TIMEFRAME (MONTHS)
2
Council response to draft
Work can commence if draft CMP is approved
Resubmission of CMP if first draft refused
3
Council response to second draft
4

Contact

1. Please provide the full postal address of the site and the planning reference relating to the construction works.

Address: 15 Gordon Street, London, WC1H OAH

Planning ref: 2015/3302/P

Type of CMP – Demolition / Construction Management Plan Early Works (Demolition) & Main Works

2. Please provide contact details for the person responsible for submitting the CMP.

Name: Ian Thomas

Address: 155 Moorgate, London, EC2M 6XB

Email: ian.thomas@macegroup.com

Phone: 0750 836 6745

3. Please provide full contact details of the site project manager responsible for day-to-day management of the works and dealing with any complaints from local residents and businesses.

Name: Josh Thomas

Address: 155 Moorgate, London, EC2M 6XB

Email: joss.thomas@macegroup.com

Phone: 0771 787 1749

4. Please provide full contact details of the person responsible for community liaison and dealing with any complaints from local residents and businesses if different from question 3.

Name: Ushna Mughal

Address: 155 Moorgate, London, EC2M 6XB

Email: ushna.mughal@macegroup.com

Phone: 07833253296

5. Please provide full contact details of the person responsible for community liaison/dealing with any complaints from local residents and businesses if different from question 3. In the case of **Community Investment Programme (CIP)**, please provide contact details of the responsible Camden officer.

Name: Janine Jasper / Ushna Mughal

Address: 155 Moorgate, London, EC2M 6XB

Email: janine.jasper@macegroup.com / ushna.mughal@macegroup.com

Phone: 07979953740

6. Please provide full contact details including the address where the main contractor accepts receipt of legal documents for the person responsible for the implementation of the CMP.

Name: Ian Thomas

Address: 155 Moorgate, London, EC2M 6XB

Email: ian.thomas@macegroup.com

Phone: 07718907854

Site

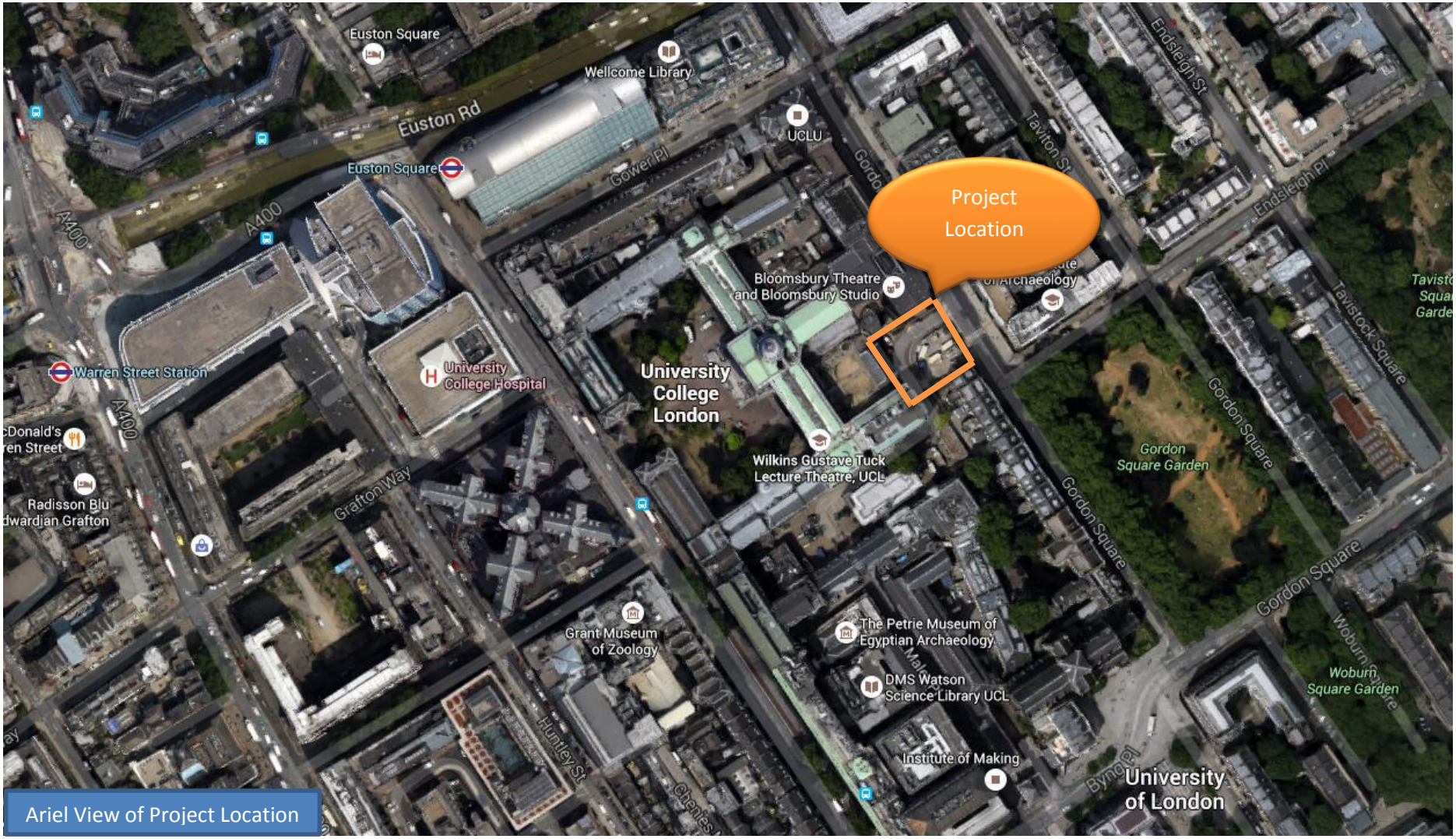
1. Please provide a site location plan and a brief description of the site, surrounding area and development proposals for which the CMP applies.

   The site is centred on National Grid reference 529650 & 182300, it occupies an area in Bloomsbury within the former London Borough of St. Pancras which now forms part of the London Borough of Camden. It lies near the British Museum (to the west) and Euston Station (to the north). Presently to the south of Bloomsbury Theatre the site forms part of the complex of buildings owned by The University College London (UCL) within the same block and immediately to the west of the original University building on the east side of Gordon Street.

   The New Student Centre project demonstrates UCL's commitment to students and will provide outstanding facilities that enhance the student experience. The brief calls for a highly sustainable new building that is distinctive, with exceptional design quality, reflecting UCL's global significance whilst not appearing elitist. It should be a building that is accessible, inclusive, and welcoming.

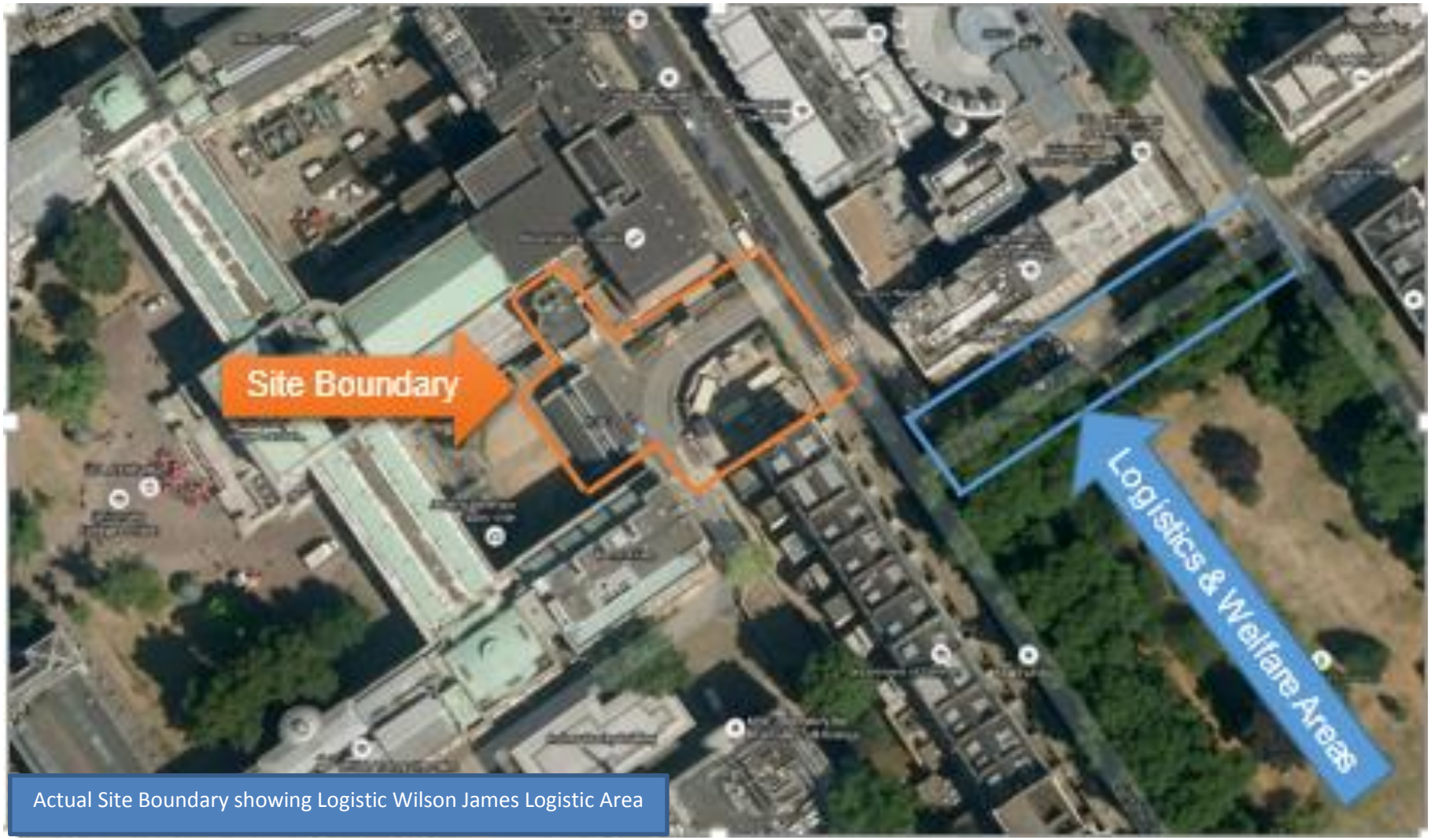
   The New Student Centre will provide two primary functions: student learning space and a Student Enquiries Centre. A range of student learning spaces are required, and the building will provide 'social' spaces including a cafe as well as space for exhibitions. The learning spaces will vary in character and size, creating different types of individual study and group collaboration settings. None of the spaces will be used for formal teaching. Dedicated to the needs of the students, the building will deliver spaces and furniture solutions that are flexible, adaptable, and IT resourced, with effective power provision.

   Flanked by listed buildings, the new building will occupy a central campus site within the Bloomsbury Conservation area. The site is a prime entrance to UCL's Bloomsbury campus and is used extensively by both pedestrians and vehicles. The project includes demolition of part of the adjacent Bloomsbury Theatre to enhance the circulation routes around and through the new building. The building will comprise four floor levels above the ground floors, and 2 levels of basement.



Ariel View of Project Location

Camden



Actual Site Boundary showing Logistic Wilson James Logistic Area

Camden

2. Please provide a very brief description of the construction works including the size and nature of the development and details of the main issues and challenges (e.g. narrow streets, close proximity to residential dwellings).

   The project is split into two main phases.

   (a) Early Works – Value £1.2 million (Demolition Phase)
   (b) Main Works – Value £30 million

   The early works demolition phase is set away from the highways carriage way and is set well within UCL campus the main challenges will be to demolish in a densely populated student area sensitive to noise dust and vibration. The main challenge to the main works will be the restricted space, keeping the emergency vehicle roads open during construction and managing the expectations of the local residence for noise, vibration and dust.

   (a) ***The Early Works*** *phase comprises the demolition of the Node structure down to foundation level including the strip out of internal fixtures and fittings, relocation of the plant (works by others), temporary protection to the remaining structure. The removal of ACBE plant room roof and wall structure and cladding including temporary edge protection. The early works will also cater for the construction of temporary stair case and the removal of the WACO building foundations, plant modifications & service diversions. A separate Demolition Construction Management plan has been written and is attached with this document as Appendix 1 it is to be read in conjunction with this main construction management plan.*

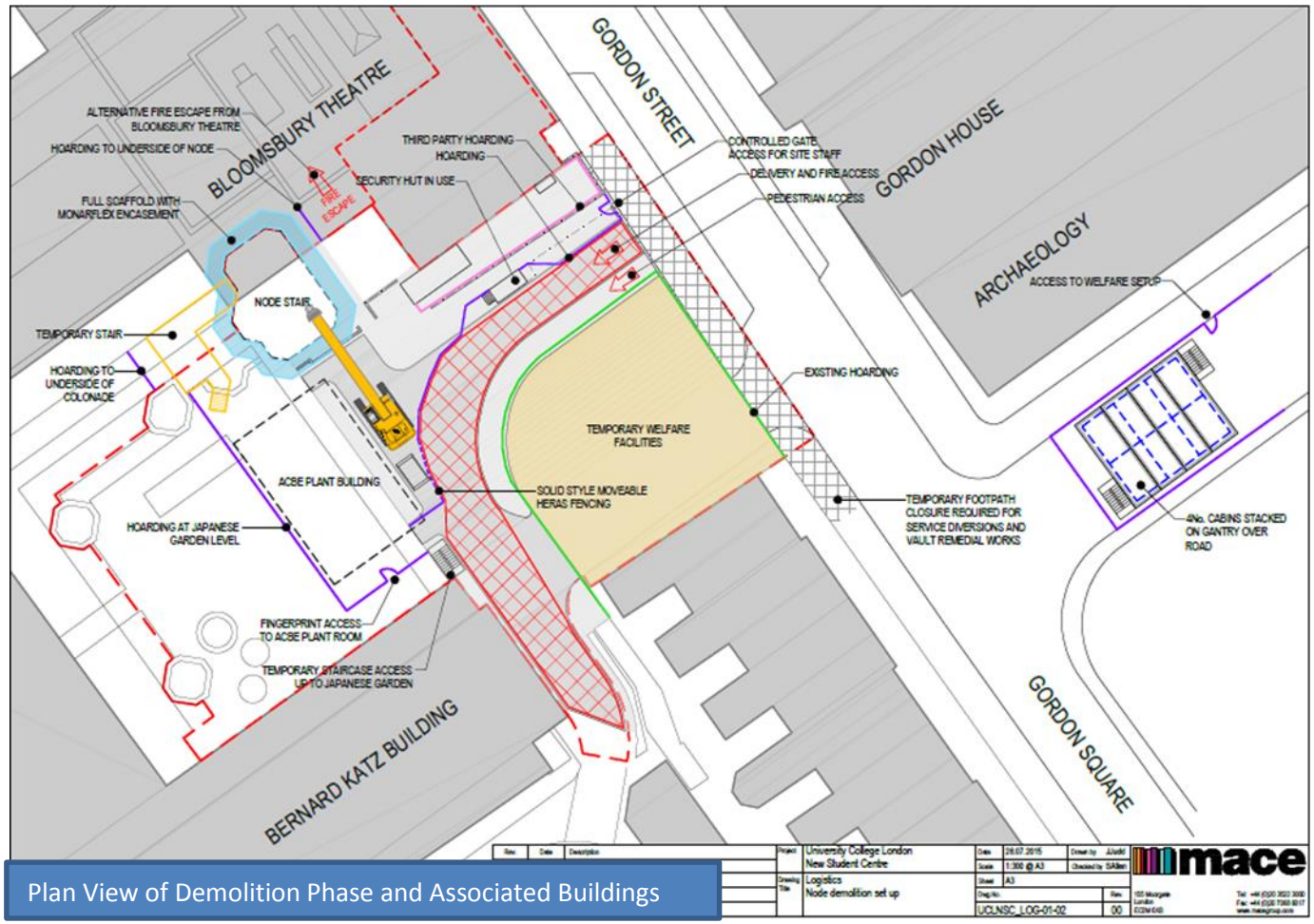
   (b) ***The Main Works*** *will consist of piled foundations, basement and in-situ and pre-cast concrete frame construction, with a brown and green roof, the shell will be a mixture of brickwork, punched windows and structural glazing. Internally the building will be constructed to a simple high standard allowing for intricate detailing works. The site welfare facilities will be positioned opposite the site on Gordon Square in an area of joint occupation with UCL's logistics company Wilson James. The main works is situated within a "live" university campus neighbouring highly sensitive laboratories, classrooms, libraries and The Bloomsbury Theatre.*
   One of the most challenging aspects of the main project work will be the interfacing of the construction works around an existing fire tender road which must be kept alive at all times. The fire tender road services UCL's existing buildings.

3. *Please identify the nearest potential receptors (dwellings, business, etc.) likely to be affected by the activities on site (i.e. noise, vibration, dust, fumes, lighting, etc.).*

   The three building's to be demolished as part of the early works (Please see Appendix 1) the Node Building, The ACBE plant room and associated louvers and a small plant room, the works will also include for the construction of a temporary stair case as planning permission ref 2015/4224/P. These buildings are position in and around the existing UCL campus only, the affected receptors from UCL for both phases are and are shown on a plan overleaf they are the

   1. *Bloomsbury Theatre*
   2. *Bernard Katz Building (UCL)*
   3. *26 Gordon Street (UCL History)*
   4. *Gordon House Building (UCL)*
   5. *Archaeology Department (UCL)*

4. Please provide a scaled plan detailing the local highway network layout in the vicinity of the site. This should include details of on-street parking bay locations, cycle lanes, footway extents and proposed site access locations.



Plan View of Demolition Phase and Associated Buildings

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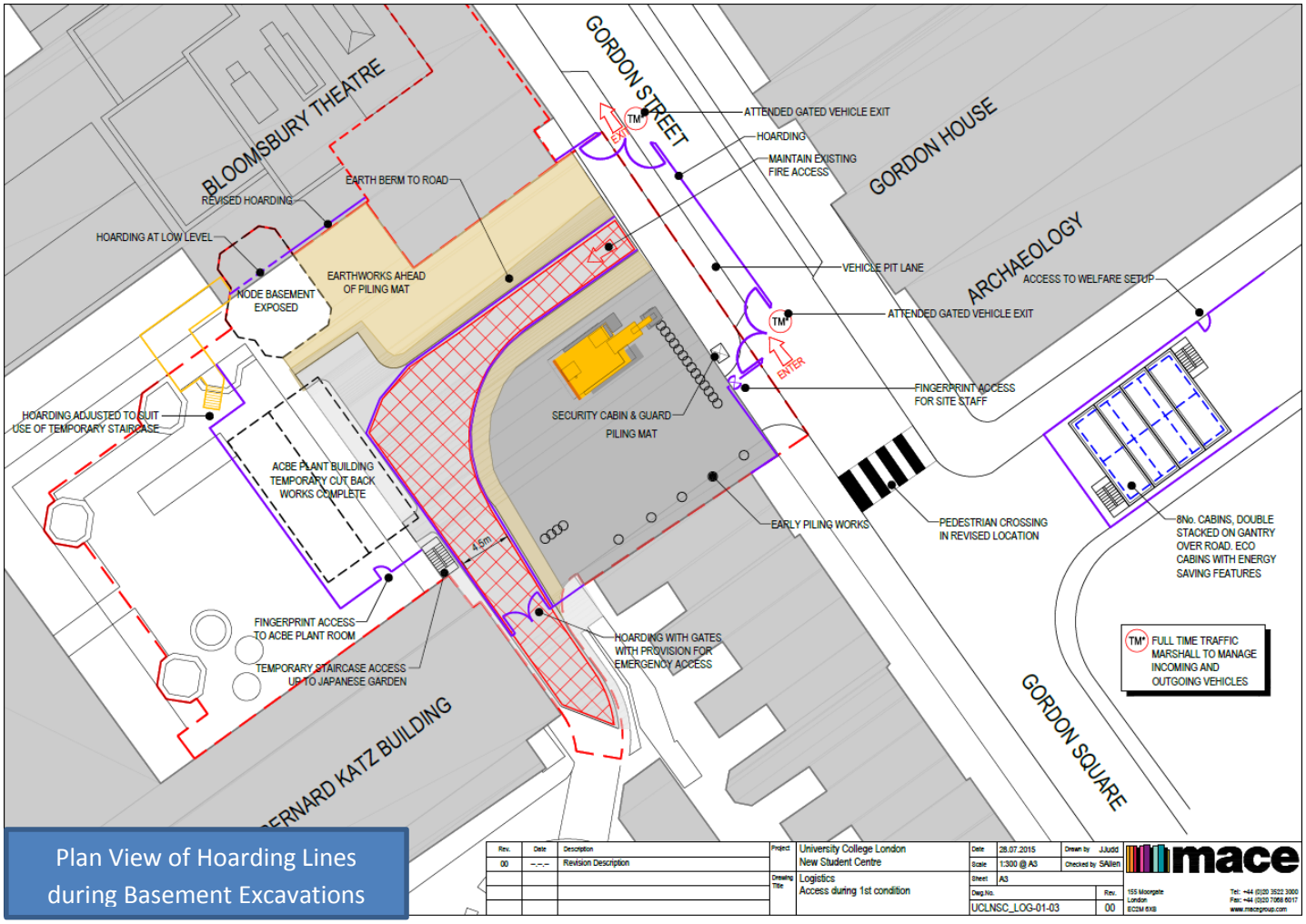

Plan View of Hoarding Lines during Basement Excavations

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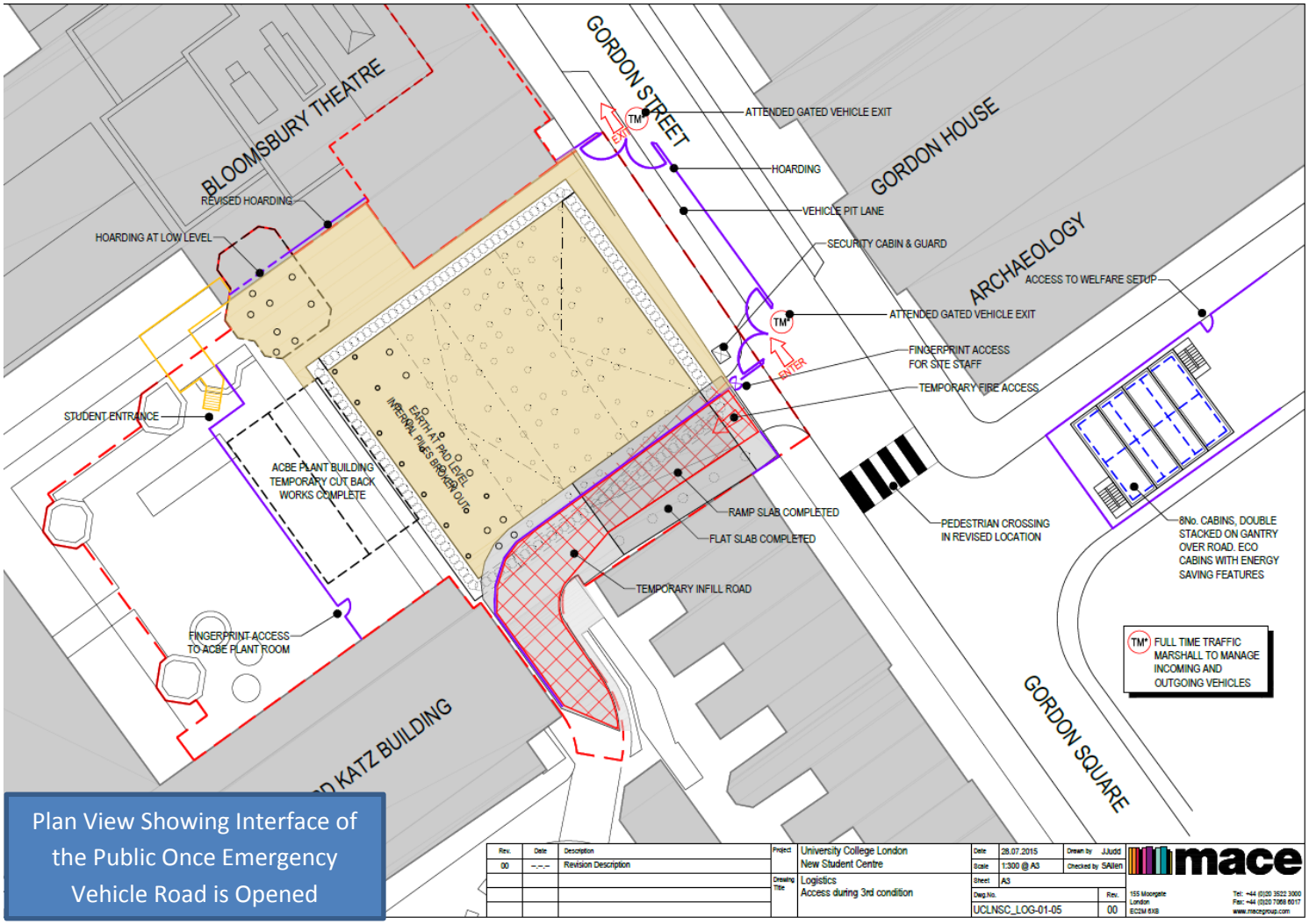
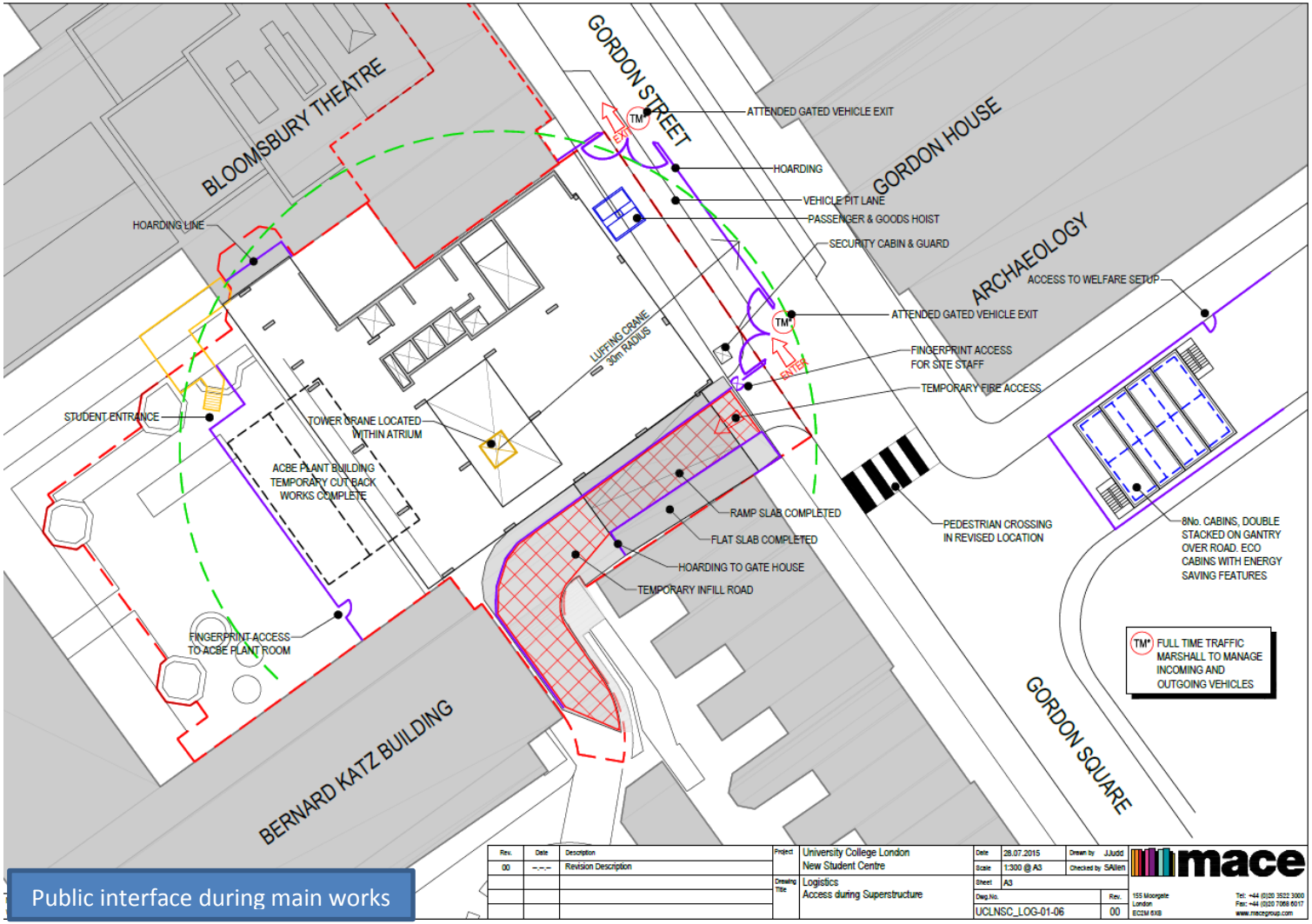
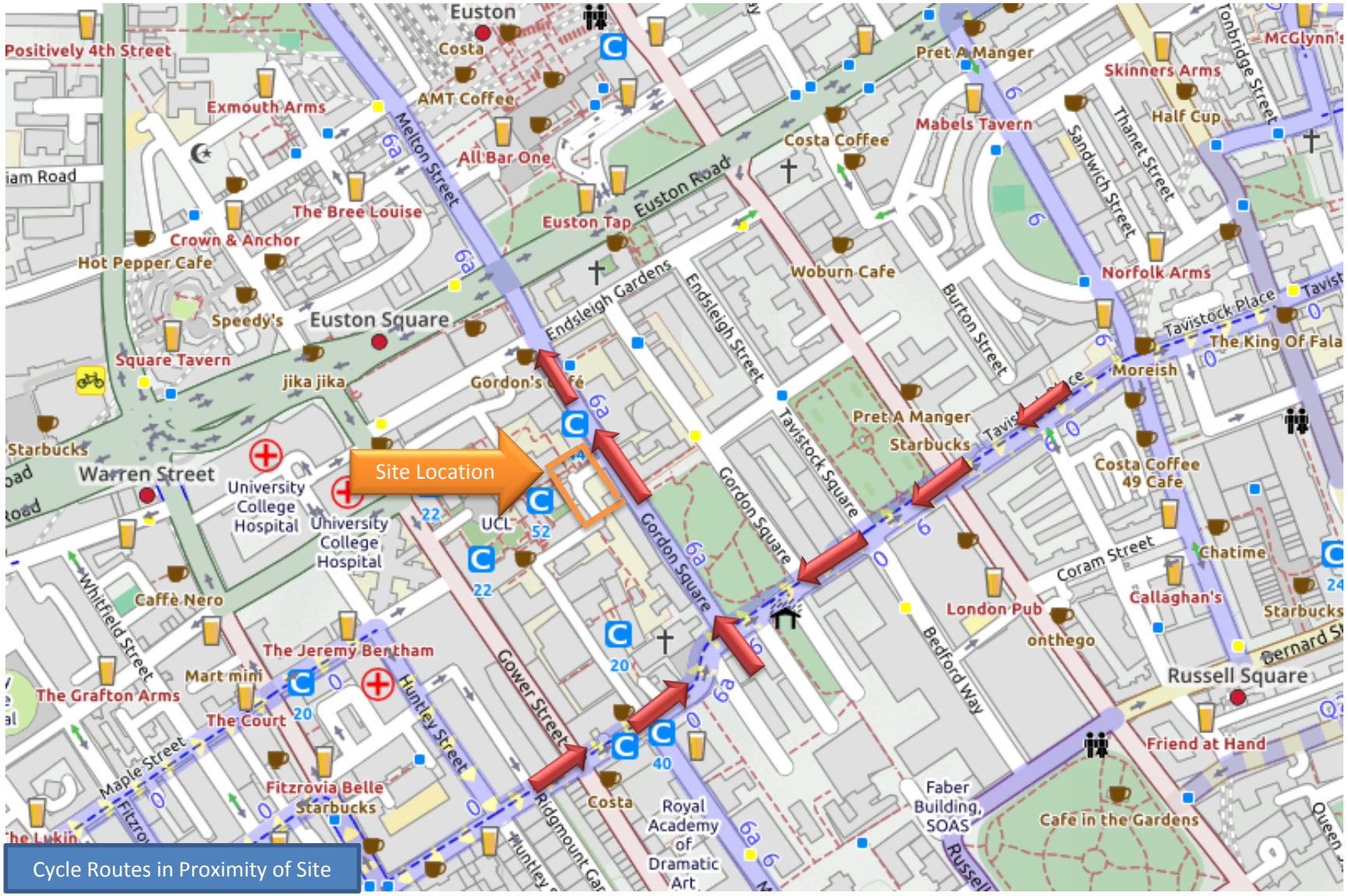


Plan View Showing Interface of the Public Once Emergency Vehicle Road is Opened



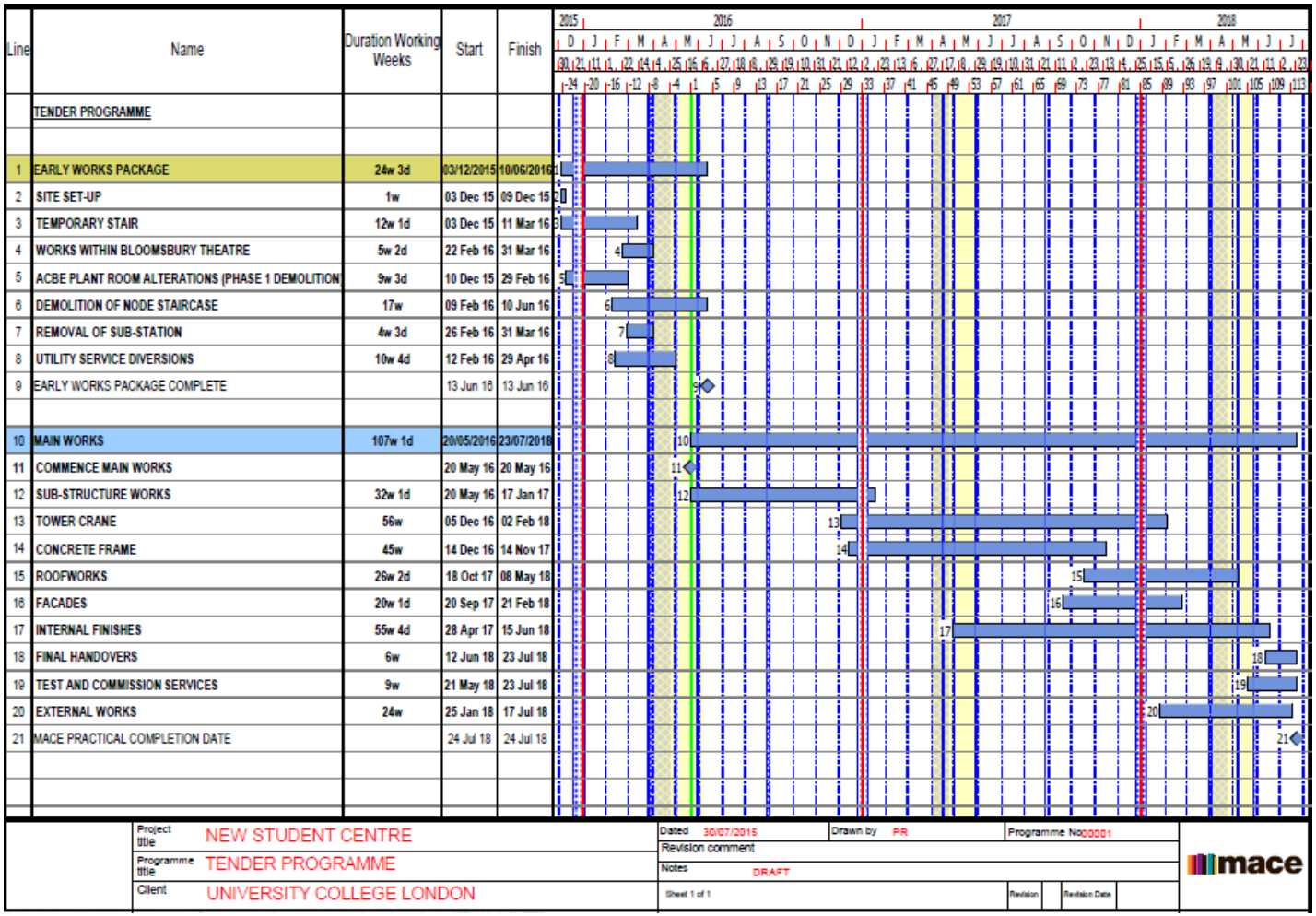
Public interface during main works

Camden


Site Location
Cycle Routes in Proximity of Site
Euston
Positively 4th Street
Costa
AMT Coffee
Exmouth Arms
All Bar One
Euston Tap
Euston Road
Pret A Manger
Costa Coffee
Mabels Tavern
Skinners Arms
Half Cup
McGlynn's
Tonbridge Street
Thanet Street
Sandwich Street
Melton Street
The Bree Louise
Crown & Anchor
Hot Pepper Cafe
Speedy's
Euston Square
Square Tavern
jika jika
Endsleigh Gardens
Endsleigh Street
Woburn Cafe
Burton Street
Norfolk Arms
Tavistock Place
The King Of Fala
Moreish
Starbucks
Warren Street
University College Hospital
University College Hospital
UCL
Tavistock Square
Pret A Manger
Starbucks
Costa Coffee 49 Cafe
Gordon Square
Coram Street
Chatime
Callaghan's
Starbucks
Caffè Nero
Whitfield Street
The Jeremy Bentham
Mart mini
The Court
The Grafton Arms
Huntley Street
Gower Street
London Pub
onthego
Bedford Way
Russell Square
Bernard St
Maple Street
Fitzrovia Belle
Starbucks
Costa
Royal Academy of Dramatic Art
Faber Building, SOAS
Friend at Hand
Café in the Gardens
Ridgmount Gardens
Queen

Camden

5. Please provide the proposed start and end dates for each phase of construction as well as an overall programme timescale. (A Gantt chart with key tasks, durations and milestones would be ideal). *Attached is our tender programme the start date has been put back by the client until potentially 29th Feb 2016.*



Line	Name	Duration Working Weeks	Start	Finish
	TENDER PROGRAMME			
1	EARLY WORKS PACKAGE	24w 3d	03/12/2015	10/06/2016
2	SITE SET-UP	1w	03 Dec 15	09 Dec 15
3	TEMPORARY STAIR	12w 1d	03 Dec 15	11 Mar 16
4	WORKS WITHIN BLOOMSBURY THEATRE	5w 2d	22 Feb 16	31 Mar 16
5	ACBE PLANT ROOM ALTERATIONS (PHASE 1 DEMOLITION)	9w 3d	10 Dec 15	29 Feb 16
6	DEMOLITION OF NODE STAIRCASE	17w	09 Feb 16	10 Jun 16
7	REMOVAL OF SUB-STATION	4w 3d	26 Feb 16	31 Mar 16
8	UTILITY SERVICE DIVERSIONS	10w 4d	12 Feb 16	29 Apr 16
9	EARLY WORKS PACKAGE COMPLETE		13 Jun 16	13 Jun 16
10	MAIN WORKS	107w 1d	20/05/2016	23/07/2018
11	COMMENCE MAIN WORKS		20 May 16	20 May 16
12	SUB-STRUCTURE WORKS	32w 1d	20 May 16	17 Jan 17
13	TOWER CRANE	56w	05 Dec 16	02 Feb 18
14	CONCRETE FRAME	45w	14 Dec 16	14 Nov 17
15	ROOFWORKS	26w 2d	18 Oct 17	08 May 18
16	FACADES	20w 1d	20 Sep 17	21 Feb 18
17	INTERNAL FINISHES	55w 4d	28 Apr 17	15 Jun 18
18	FINAL HANDOVERS	6w	12 Jun 18	23 Jul 18
19	TEST AND COMMISSION SERVICES	9w	21 May 18	23 Jul 18
20	EXTERNAL WORKS	24w	25 Jan 18	17 Jul 18
21	MACE PRACTICAL COMPLETION DATE		24 Jul 18	24 Jul 18

Camden

6. Please confirm the standard working hours for this site, noting that the standard working hours for construction sites in Camden are as follows:

   Working hours for the site will be as detailed below which conforms to London Borough of Camden's stipulations.

   8.00am to 6pm on Monday to Friday
   8.00am to 1.00pm on Saturdays
   Mace do not have works programmed for Sundays or Public Holidays

7. Please indicate if any changes to services are proposed to be carried out that would be linked to the site during the works (i.e. connections to public utilities and/or statutory undertakers' plant). Larger developments may require new utility services. If so, a strategy and programme for coordinating the connection of services will be required. If new utility services are required, please confirm which utility companies have been contacted (e.g. Thames Water, National Grid, EDF Energy, BT. etc.) You must explore options for the utility companies to share the same excavations and traffic management proposals. Please supply details of your discussions.

   Although the construction value of the project is estimated to be £30 million there will be no requirement for any new utility services, in general the existing UCL infrastructure has enough capacity to accommodate the new development, however there will be an element of re-routing for UKPN HV electrical, Water, Gas and BT infrastructure works. The BT / Openreach, Water and Gas re-routing works will occur in the footpath situated with the curtilage of our proposed site hoarding line however the UKPN HV electrical cable will require re-routing and jointing in the road just outside the proposed hoarding line probably just outside 26 Gordon Street, currently we are not sure of the exact position this will take place as we are only in preliminary talks with UKPN.

Community Liaison

Significant time savings can be made by running an effective neighbourhood consultation process. This should be undertaken in the spirit of cooperation rather than one that is dictatorial and unsympathetic to the wellbeing of local residents and businesses.

These are most effective when initiated as early as possible and conducted in a manner that involves the local community. Involving locals in the discussion and decision making process helps with their understanding of what is being proposed in terms of the development process. Ideally this consultation and discussion process should have already started with the results incorporated into the CMP first draft submitted to the Council for discussion and sign off. This communication should then be ongoing during the build, with neighbours and any community liaison groups being regularly updated with programmed works and any changes that may occur due to unforeseen circumstances through newsletters, emails and meetings.

Please note that for larger sites, details of a construction working group may be required as a separate S106 obligation. If this is necessary, it will be set out in the S106 Agreement as a separate requirement on the developer.

Cumulative impact

Sites located within high concentrations of construction activity that will attract large numbers of vehicle movements should consider establishing contact with other sites in the vicinity in order to manage traffic routeing and volumes. Developers in the Tottenham Court Road area have done this to great effect.

The Council can advise on this if necessary.

1. Consultation

The Council expects meaningful consultation. For large sites, this may mean two or more meetings with local residents prior to submission of the first draft CMP.

Details should include who was consulted, how the consultation was conducted and a summary of the comments received in response to the consultation. In response to the comments received, the CMP should then be amended where appropriate and, where not appropriate, a reason should be given. The revised CMP should also include a list of all the comments received. Developers are advised to check proposed approaches to consultation with the Council before carrying them out. If your site is on the boundary between boroughs then we would recommend contacting the relevant neighbouring planning authority.

Please provide details of consultation of draft CMP with local residents, businesses, local groups (e.g. residents/tenants and business associations) and Ward Councillors.

Mace have been in consultation with UCL user groups (who are the local residents) that will be affected by the development since October, the latest meeting was held on Monday 30th November 2015, from these meeting's a residents communication brief (shown overleaf) has been drafted for comment and action by the various parties.

A meeting has been arranged for the UCL local residents and all others affected by the development, Mace are calling it "meet the contractor" it's been organized for Thursday 21st January where Mace will present the proposals for the development including the communication process.

UCL NEW STUDENT CENTRE RESIDENTS COMMUNICATION BRIEF
November 2015

OVERVIEW

Mace is committed to keeping all UCL New Student Centre stakeholders and neighbours updated on the development of the project. All communication procedures, methods and activities suggested in this document are designed to ensure that that the needs of local neighbours are supported, in particularly around the following issues:

1) **Noise, dust and vibration:** The proximity of the site to a number of academic departments means that we will need to mitigate the effects of noise, dust and vibrations, especially during exam periods. Some experiments in the chemistry laboratories could also be at risk due to vibrations. Neighbours will need to be informed of the measures put in place to mitigate the effects of noise and vibration and maintain air quality.
2) **Road safety:** The large volume of pedestrians and cycles on Gordon Street and nearby roads means that we need to consider the safety of local cyclists and vulnerable road users. As this road is open to general public and accessed regularly by UCL students this means that it will be difficult to track who will be affected by the construction works. Therefore, neighbours will be need to be information regarding the logistics and vehicle movement.
3) **Understanding the need of NSC:** Some students may not understand why the NSC project is being built and how it may affect them. Students will need to be informed how the construction will alter their altered throughout the construction and the benefits of the finished scheme.

Key stakeholders

- **Near neighbours:** Library Services, Bernard Katz - Department of Biochemical Engineering, London Centre for Nanotechnology, History, UCLU (Student Union), Christopher Ingold Building - Department of Chemistry, Gordon House - Department of Archaeology, Greek and Latin, Campbell House West, Bloomsbury Theatre (Café at Bloomsbury Theatre, UCL Shop, UCLU Rights and Advice, Clubs and Society Centre), Gordon Square,
- **Other groups:** Bloomsbury Square Heritage, Beatty Balfour and other contractors, Royal Historical Society, Exam and Registry, University of London, Room Booking, Catering Company Sudexo, UCL student societies and committees, road users, local student and other residents

Identifying and responding to concerns and complaints from neighbours

Actions/activities	Description
Community liaison meetings	- Provide site updates and information about upcoming activities - Provide a forum for concerns to be raised and complaints to be discussed - Identify and share opportunities with UCL departments to collaborate on community engagement activities - Review effectiveness of communication process
Logging and identifying complaints	Mace proposes to use FM24 Helpline to identify and log complaints from members of the public, students, staff members, local authority or any other stakeholder in relation to any site activity. Mace will coordinate a meeting with UCL to identify the most suitable process for responding to complaints.

Communicating with neighbours

Actions/activities	Description
Meet the contractors event	An event that brings together all stakeholders to introduce them to Mace, key contacts and plans for the site. (Potential date: 21 January 2016)
Issue monthly updates to key stakeholders through a combination of online communication methods (see examples overleaf)	- Site update and activities - Key milestones - Complaints procedure and contact details - Community engagement updates including dates of residents meetings - Architectural images
Notices around the campus	We can place updates about site activities (technical information alongside measure to improve students experience during construction) on the hoarding around the site and notice boards around the campus.

UCL NEW STUDENT CENTRE RESIDENTS COMMUNICATION BRIEF
November 2015

Examples from previous projects

Newsletters/e-alerts: We can provide residents with updates on Transforming UCL website to keep them informed including site operational hours, project timeline and named key contacts. As required we can also issue alerts to inform residents of any unforeseeable circumstances that affect them.

Alerts for TV screens: We can also provide content for TV screens alerts to give advance notice of upcoming works. For example:

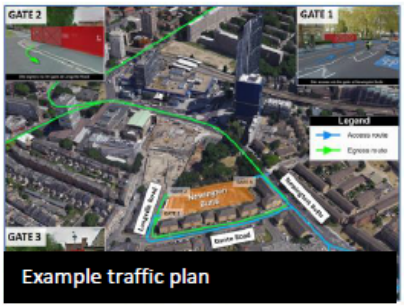
> Construction works update
> On 13th March a piling rig will be removed from site.
> Due to Metropolitan Police rules the removal will take place between 6-8pm.
> As always, there will be Mace managers overseeing the operation and we will endeavour to minimise disruption to our neighbours.
> **Contact Ushna Mughal (ushna.mughal@macegroup.com) for any queries/comments.**

Social Media: We will monitor and record relevant social media activity to identify if anyone is disgruntled by the works and arrange face to face meetings to resolve problems if needed. We can provide updates for Transforming UCL webpage and Twitter page as well as a named contact for enquiries/complaints. For example:

Join us at the Meet the Contractors event (16 Dec @4:30) to ask any questions about #UCLNewStudentCentre and find out more about the planned work.

Thank you for your patience as we continue building the #UCLNewStudentCentre. On completion this building will supply students with more study space and a welcoming café.

As we gear up to being on site, we wanted to inform you of the site's plans for construction traffic, which has been agreed with Camden Council. Vehicular access to and from site will be overseen by traffic marshals who will be responsible for ensuring the traffic plan is followed. Contact Ushna Mughal (ushna.mughal@macegroup.com) for more information.



Example traffic plan

Mace Information Handling Classification: Unrestricted

Safety first. Second nature.

mace Camden

UCL NEW STUDENT CENTRE RESIDENTS COMMUNICATION BRIEF
November 2015

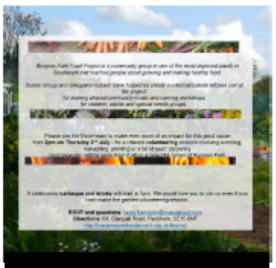
Community engagement events

All proposed actions for community engagement takes a consultative approach and involve collaborating with UCL residents to develop activities that fulfil the needs of the community.

1. Road safety	
Action	**Description**
Set up Road safety event to identify the best way for Mace to work with local cyclists and pedestrians	Local cyclists and pedestrians will improve their understanding of the perspective of an HGV driver and how restrictive the current design of an HGV is in relation to visibility of cyclists and other vulnerable road users.
2. Sustainability	
Action	**Description**
Liaise with Mace and UCL sustainability team to engage residents in activities to reduce environmental footprint	For example, identify resources from the site that can be recycled or reused by the university, building biodiversity roofs, allocating cycling spaces and other mutually beneficial activities.
3. Building employability skills within the community	
Action	**Description**
Identify skills based volunteering activities with Mace site team	Mace employees will be able to share their skills and knowledge of the construction industry.
Organise site tours	Increase understanding of the construction work
4. Information stalls/room/models	
Action	**Description**
Informative events	Bespoke information events will be developed in collaboration with students and staff starting mid-March to warn students about potential noisy periods, measures for noise mitigation prior to exam periods (e.g NSC model space/room/stall, stall at the libraries)

Examples of previous community engagement events

University of Birmingham educational site visit



Gardening and food projects

Cycle safety events

2. Construction Working Group

Please provide details of community liaison proposals including any Construction Working Group that will be set up, addressing the concerns of the community affected by the works, the way in which the contact details of the person responsible for community liaison will be advertised to the local community, and how the community will be updated on the upcoming works i.e. in the form of a newsletter/letter drop, or weekly drop in sessions for residents.

As the London Borough of Camden are aware UCL have been undertaking numerous construction works to redevelop their campus over the last few years, part of this process has been the instigation of a neighbourhood co-ordination meeting which occurs on a fortnightly basis, presently these are being chaired by another principle contractor however it's anticipated that when works to the New Student Centre commences chairing of this meeting will automatically default to Mace.

The neighbourhood co-ordination meeting is designed to up-date the local UCL residents on progress, up-coming activities that might affect their daily routine and a vehicle for the residents to voice their concern. Other means of proposed communication are detailed above in the neighbourhood communication briefing document and will include for –

1. *Community Liaison Meeting – Via the UCL neighbourhood meeting*
2. *Official Logging of Complaints – Via FM 24/7*
3. *Meet the contractor – A one off meeting to present the scheme to the local community.*
4. *Monthly Up-dates – Via UCL internet / web page*
5. *Newsletter – Downloaded onto UCL website*
6. *Notice boards – Positioned around the site and campus*
7. *Workshop – On cycle safety with local users*
8. *Workshops – On sustainability with UCL residents.*
9. *Workshops – On bespoke topics as necessary either promoted by Mace or UCL*

3. Schemes

Please provide details of any schemes such as the 'Considerate Constructors Scheme', such details should form part of the consultation and be notified to the Council. Contractors will also be required to follow the "Guide for Contractors Working in Camden" also referred to as "Camden's Considerate Contractors Manual".

Its Mace Group's policy that all project are signed up to the "Considerate Constructors Scheme" also UCL New Student Centre CCS has CSCS a Breeam requirement.

4. Neighbouring sites

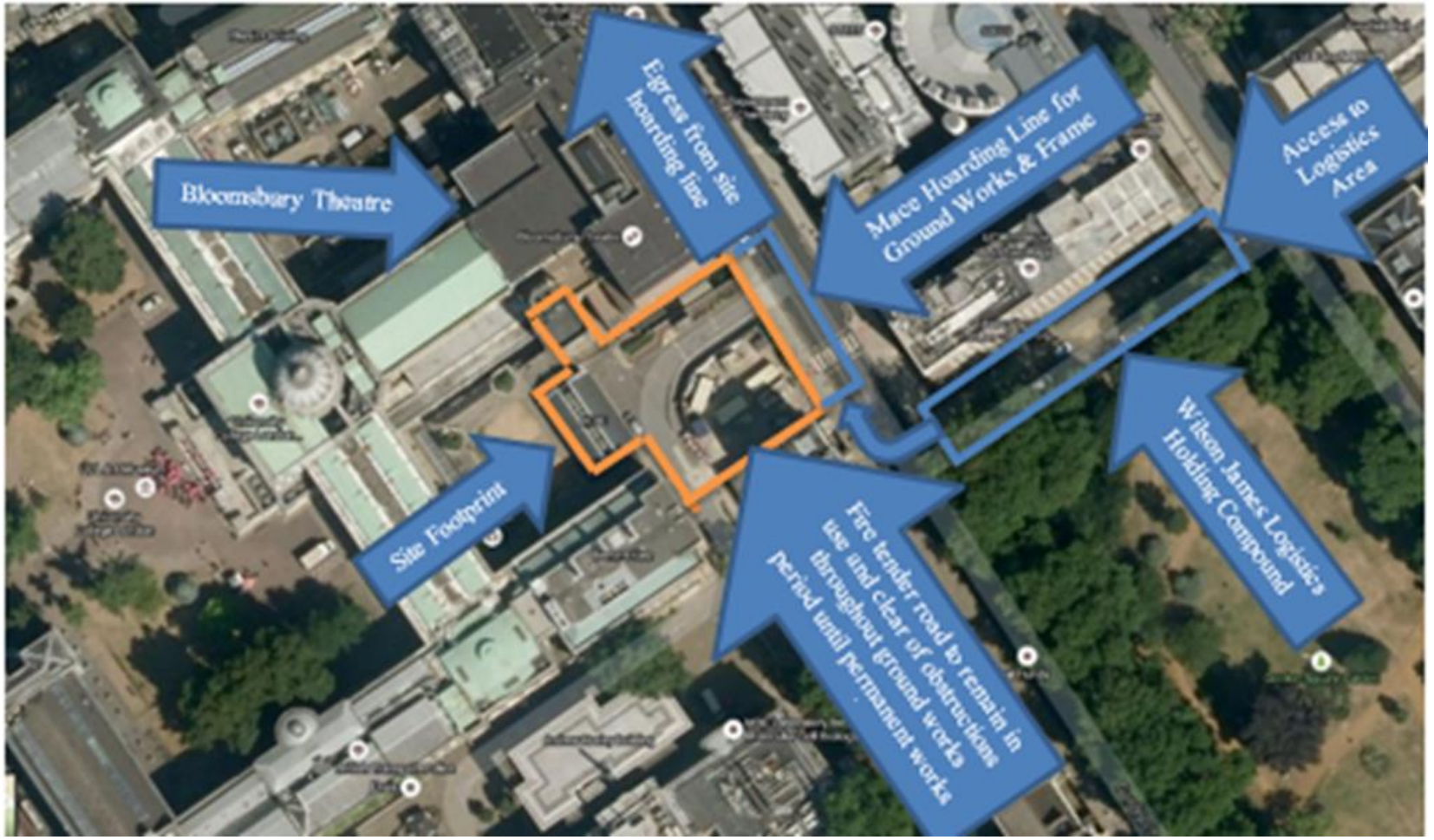
Please provide a plan of existing or anticipated construction sites in the local area and please state how your CMP takes into consideration and mitigates the cumulative impacts of construction in the vicinity of the site. The council can advise on this if necessary.

Overleaf we have attached a plan of the local area where the new development is situated there are four large UCL construction projects situated in the near vicinity however their and our impact on the local community and local residents have been mitigation by UCL who have employed a professional logistics company Wilson James to manage all incoming deliveries to all of their construction projects.

Also over leaf we have attached a map showing the logistics area which shows the Wilson James holding areas and how the flow of vehicles are managed in the vicinity to ease vehicle congestion and the impact on the local community.


UCL Refurbishment Works
Redevelopment to Bentham House& Gideon Wing – Gilbert Ash
Endsleigh Gardens
Endsleigh St
Endsleigh Pl
Taviton St
Wellcome Library
Wellcome Trust
UCLU
London Nanote
SSEES
Wates House Refurbishment – Gilber Ash
Wilkins Terrace Lower Refectory Project by Balfour Beatty UCL Tunnel
UCL Institute of Archaeology
Tavistock Square Gardens
Tavistock Squ
Mace New Development New Student Cantre
University College London

Camden


Bloomsbury Theatre
Egress from site hoarding line
Mace Hoarding Line for Ground Works & Frame
Access to Logistics Area
Site Footprint
Fire tender road to remain in use and clear of obstructions throughout ground works period until permanent works
Wilson James Logistics Holding Compound

Camden

Transport

This section must be completed in conjunction with your principal contractor. If one is not yet assigned, please leave the relevant sections blank until such time when one has been appointed.

Camden is a CLOCS Champion, and is committed to maximising road safety for Vulnerable Road Users (VRUs) as well as minimising negative environmental impacts created by motorised road traffic. As such, all vehicles and their drivers servicing construction sites within the borough are bound by the conditions laid out in the CLOCS Standard.

This section requires details of the way in which you intend to manage traffic servicing your site, including your road safety obligations with regard to VRU safety. It is your responsibility to ensure that your principal contractor is fully compliant with the terms laid out in the CLOCS Standard. It is your principal contractor's responsibility to ensure that all contractors and sub-contractors attending site are compliant with the terms laid out in the CLOCS Standard.

Checks of the proposed measures will be carried out by the council to ensure compliance. Please refer to the CLOCS Standard when completing this section. Guidance material which details CLOCS requirements can be accessed here, details of the monitoring process are available here.

Please contact CLOCS@camden.gov.uk for further advice or guidance on any aspect of this section.

Please refer to the CLOCS Overview and Monitoring Overview documents which give a breakdown of requirements.

CLOCS Considerations

1. Name of Principal contractor:

   Mace Group

2. Please submit the proposed method for checking operational, vehicle and driver compliance with the CLOCS Standard throughout the duration of the contract (please refer to our CLOCS Overview document in the appendix and CLOCS Standard point 3.4.7).

   Mace's requirements for CLOCS and its on-site procedures are issued out with each tender enquiry to the supply chain, these are subsequently checked at the mid bid tender stage with each sub-contractor. These processes will be confirmed before placement of the order with the sub-contractors and again at the pre start meetings. When the project works commences the checking of CLOCs will eventually be managed by the Wilson James & Mace banksman and security guard managing the entry gates who will be in turn be supervised by one of Mace's construction managers. Mace's CLOCs procedures are shown overleaf.

If no to any of these requirements vehicle is Rejected and Yellow Jacket observation raised.

REJECT – VEHICLE CHECK

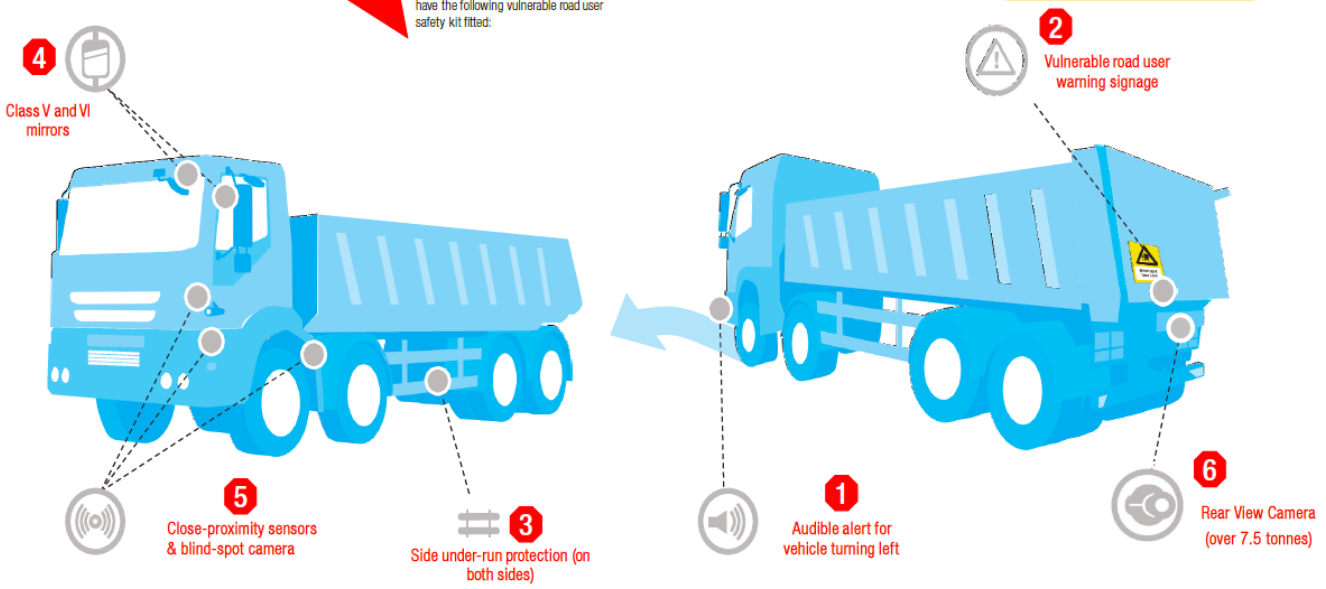
1. Audible alert for vehicle turning left
2. Vulnerable road user warning signage
3. Side under-run protection (on both sides
4. Blind-spot minimisation Class V & VI Mirrors
5. Blind-spot minimisation camera system and/or Sensor System and/or Fresnel Lens
6. Rear View Camera (Vehicles over 7.5 tonnes)

Any vehicle over 3.5 tonnes gvw shall have the following vulnerable road user safety kit fitted:

If no to any of the requirements vehicle is permitted but Yellow Jacket observation is raised.

DRIVER CHECK

1. Driver must have a valid driving licence for the vehicle they are driving.
2. Driver must be able to prove they have undertaken approved vulnerable road user training.
3. Do you have proof of qualification operation certification (FORS or equivalent
4. Have you been provided with a traffic routing plan to this site by your employer.
5. Do you have means of recording accidents.



Camden

Vehicle Log Sheet - FORS/CLOCS

No.	Vehicle Registration	Drivers Name	Company	Delivering To (Name/Company)	Descriptions of Materials	Distance to site	Time In	Time Out	Date	Vehicle Type	Fuel Type	5 Point Vehicle Check Pass/Fail						Rejected YJ Actioned	5 Point Driver Check					YJ Observation Actioned
												1	2	3	4	5	6		1	2	3	4	5	
1																								
2																								
3																								
4																								
5																								
6																								
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3. Please confirm that you as the client/developer and your principal contractor have read and understood the CLOCS Standard and included it in your contracts. Please sign-up to join the CLOCS Community to receive up to date information on the standard by expressing an interest online.

I confirm that I have included the requirement to abide by the CLOCS Standard in my contracts to my contractors and suppliers:

Ian Thomas, Project Manager, Mace

Please contact CLOCS@camden.gov.uk for further advice or guidance on any aspect of this section.

Site Traffic

Sections below shown in blue directly reference the CLOCS Standard requirements. The CLOCS Standard should be read in conjunction with this section.

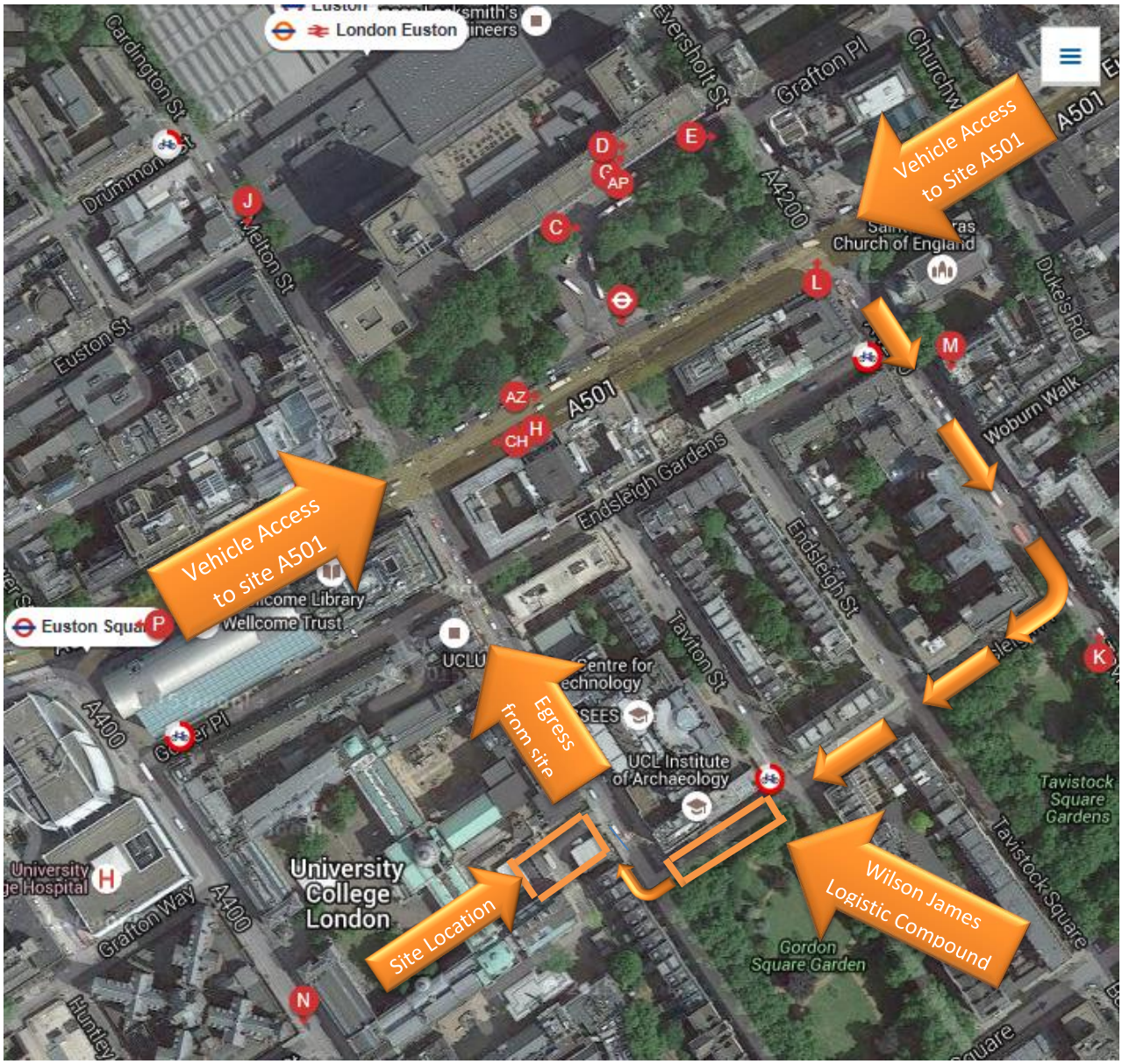
4. Traffic routing: *"Clients shall ensure that a suitable, risk assessed vehicle route to the site is specified and that the route is communicated to all contractors and drivers. Clients shall make contractors and any other service suppliers aware that they are to use these routes at all times unless unavoidable diversions occur."* (P19, 3.4.5)

Routes should be carefully considered and risk assessed, taking into account the need to avoid where possible any major cycle routes and trip generators such as schools, offices, public buildings, museums etc. Where appropriate, on routes that use high risk junctions (i.e. those that attract high volumes of cycling traffic) installing Trixi mirrors to aid driver visibility should be considered.

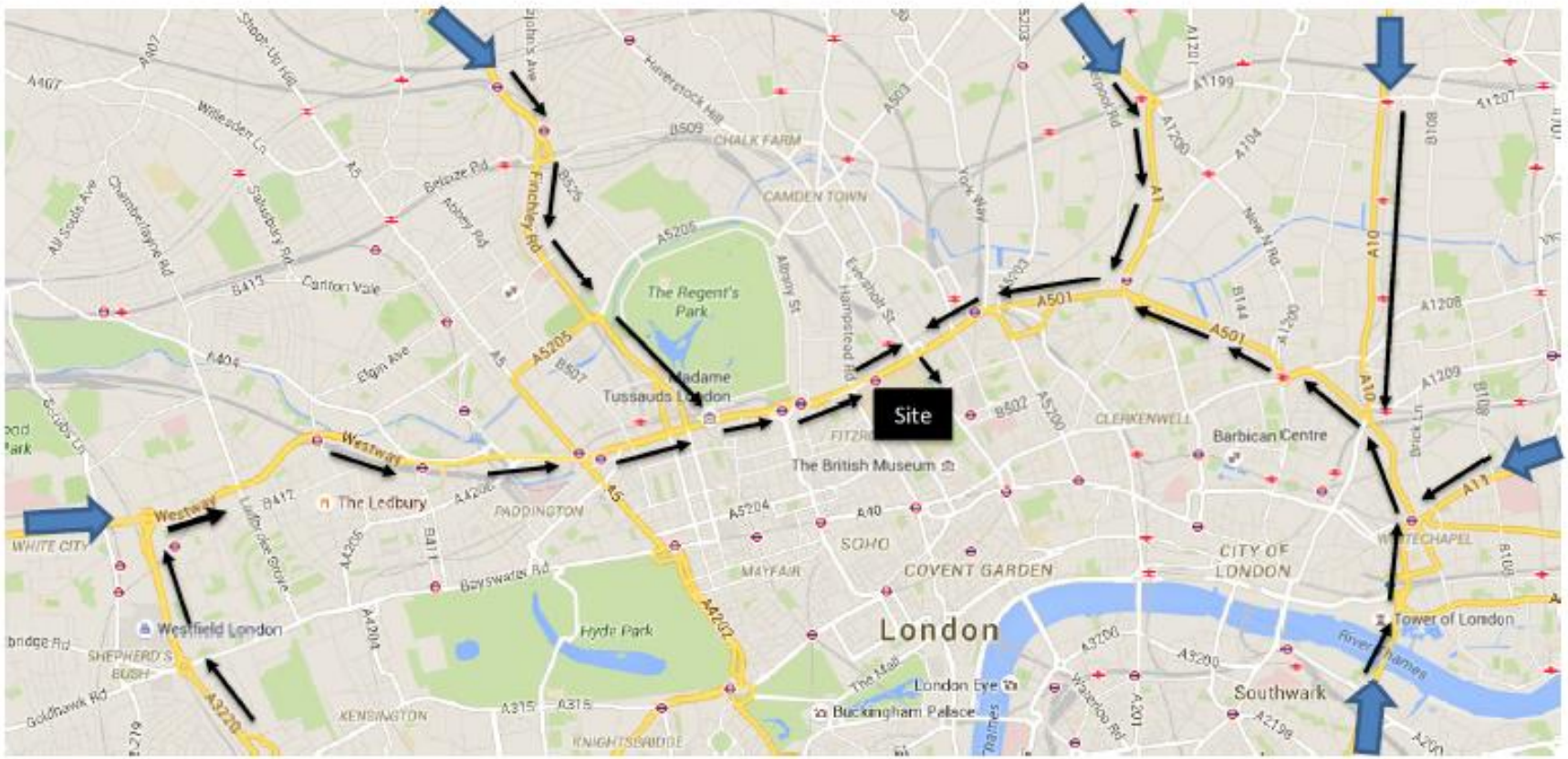
Consideration should also be given to weight restrictions, low bridges and cumulative impacts of construction (including neighbouring construction sites) on the public highway network. The route(s) to and from the site should be suitable for the size of vehicles that are to be used.

a. Please indicate routes on a drawing or diagram showing the public highway network in the vicinity of the site including details of links to the Transport for London Road Network (TLRN).

Vehicle movements within the public highway network are shown overleaf for both the inner Local Authority vicinity and am external 2 mile radius.


Vehicle Access to Site A501
Vehicle Access to site A501
Egress from site
Site Location
Wilson James Logistic Compound
London Euston
Euston Square
University College London
UCL Institute of Archaeology
Church of England
Wellcome Trust
Endsleigh Gardens
Woburn Walk
Tavistock Square Gardens
Gordon Square Garden
Grafton Way
Euston St
Melton St
Cardington St
Eversholt St
Grafton Pl
Endsleigh St
Tavton St
Duke's Rd
A501
A4200
A400

Camden



Above plan is to be read in conjunction with the CMP existing plan the blue arrows show the agreed access points for all deliveries accessing site to avoid cycle routes within the Borough of Camden

Vehicle Routes

Camden

b. Please confirm how contractors, delivery companies and visitors will be made aware of the route (to and from the site) and of any on-site restrictions, prior to undertaking journeys.

Mace's sub-contractors will be initially made aware of the traffic route and logistics arrangement through the tender process when the H& CMP and Traffic and Logistic Plans are issued out electronically, any changes to these will be conveyed to the sub-contractors through the tender mid bid process / meetings.

Any Mace sub-contractor will then be informed of any changes to any routes or logistics at the pre-start meeting and then the induction process just before they start work on site. During the time when the sub-contractors are on site they will attend weekly activity meeting where further changes will be documented and discussed face to face.

As well as the above all sub-contractors organising deliveries require to book each delivery and it's impending date and time electronically with UCL logistics company Wilson James and any changes that has occurred to the delivery routes or arrangement will also be conveyed through this process, electronically

5. Control of site traffic, particularly at peak hours: "*Clients shall consider other options to plan and control vehicles and reduce peak hour deliveries"* (P20, 3.4.6)

Construction vehicle movements are generally acceptable between 9.30am to 4.30pm on weekdays and between 8.00am and 1.00pm on Saturdays). If there is a school in the vicinity of the site or on the proposed access and/or egress routes, then deliveries must be restricted to between 9.30am and 3pm on weekdays during term time. (Refer to the *Guide for Contractors Working in Camden*).

A delivery plan should ensure that deliveries arrive at the correct part of site at the correct time. Instructions explaining such a plan should be sent to all suppliers and contractors**.** Consideration should be given to the location of any necessary holding areas for large sites with high volumes of traffic. Vehicles must not wait or circulate on the public highway. Whilst deliveries should be given set times to arrive, dwell and depart, no undue time pressures should be placed upon the driver at any time.

a. Please provide details of the typical sizes of all vehicles and the approximate frequency and times of day when they will need access to the site, for each phase of construction. You should estimate the average daily number of vehicles during each major phase of the work, including their dwell time at the site. High numbers of vehicles per day and/or long dwell times may require vehicle holding procedures.

UCL have employed Wilson James as a logistics company to cater for the whole needs of the UCL campus in regard to vehicles movement and management, Wilson James co-ordinate and manage UCL deliveries as well as all construction vehicles that attend any live construction sites within the UCL campus. It will be Mace's responsibility to work within Wilson James pre-arranged plan which has been agreed with The London Borough of Camden, part of this logistic plan is that all deliveries are pre booked in advance electronically to avoid congestion and dwell time.

The project is split into two main stream of works the early works which deals with demolition and the main works forms the construction of the New Student Centre.

Early Works

The early works will have two visits from a 2.66 meter wide 6 axeled articulated lorry with an approximate weight of 40 tonnes which will deliver and collect the crawler crane and a daily visit from a 2.5 meter wide 4 axeled 30 tonne skip wagon to cart away the demolished materials. Mace will have one welfare unit which will be delivered and collected via 2.5 meter wide 5 axeled 40 tonne Hiab lorry, these larger deliveries will be organised to arrive on site very early to avoid traffic congestion where they will be held in the Wilson James logistic area until site access arranged, it would be Mace's plan that these vehicles unloaded on or before 7:00am to avoid pedestrian and traffic congestion.

All other deliveries will be from standard 2 axeled goods vehicles or small lorries with a weigh range of between 3.5 and 20 Tonnes we would expect on average no more than one delivery per day. All these delivery vehicles will be managed by Wilson James the larger vehicles will be walked / banked to the Mace site from the logistic area whereby the smaller will be un-loaded within the logistics area and distributed by Wilson James to the Mace construction site via fork lift with the assistance of a banks man, these deliveries will be organised to arrive during normal delivery hours of 8:00am and 6:00 or as stipulated by Wilson James to avoid pedestrian / traffic congestion.

Main Works

The main works will includes for piled foundations, a basement construction, a concrete frame, brickwork and schuco cladded elevations, green and brown roofs and internal fit out. The main vehicle logistical problem to overcome within the main works will be the erection of the tower carne, this operation will require a road closure licence for Gordon Street and we would anticipate carrying out the works on a specified weekend for safety and logistical reasons (Unless otherwise stated by The London Borough of Camden) the crane would be delivered in sections on say six a 2.66 meter wide flat bedded, 40 tone articulated lorries delivered in staggered formation this operation will need an approximate 130 tonne carne for installation presently we don't have a date or the lifting plan for this operation, we are currently working on its development.

The sub-structure deliveries will include for the piling rig & associated equipment, basement excavators and earthwork temporary supports, these will be generally delivered from a 2.66 meter wide 6 axeled articulated lorry with an approximate weight of 40 tonnes, we envisage on average a delivery every day for the first three working days of each main works activity and expect the same for the collection of the vehicles at the completion of the works activity. For the sub-structure phase of works we are predicting that the will be pouring concrete for approximately 16 weeks and will have say on average 6 five axeled, 30 Tonne concrete wagon deliveries per day, during excavation of the basement we will be carting away 40 loads of "muck away" per day via 4 axeled 30 Tonne large lorries.

All other deliveries for the sub-structure works will be delivered via standard 2 axeled goods vehicles or small lorries with a weigh range of between 3.5 and 20 Tonnes, we would expect on average no more than 4 on average per day in addition to this we would expect 1 delivery per day for segregated waste which will be collected via a 3 axeled 30 tonne large lorry. All these delivery vehicles will be managed by Wilson James the larger vehicles will be walked / banked to the Mace site from the logistic area whereby the smaller will be un-loaded within the logistics area and distributed by Wilson James to the Mace construction site via fork lift with the assistance of a banks man, these deliveries will be organised to arrive during normal delivery hours of 8:00am and 6:00 or as stipulated by Wilson James to avoid pedestrian / traffic congestion.

The super structure will include mainly for concrete frame construction, brickwork elevations, schuco cladding a brown and green roof and internal fit out. The main deliveries for the works will be formwork and falsework and scaffold which will be delivered on a 5 axeled flat bedded 30 Tonne lorries at a frequency of 2 per day for a 35 week duration, for the concrete frame pour we envisage lorries attending for an approximate period of 24 weeks and will have say on average 4 five axeled 30 Tonne concrete wagon deliveries per

day for column works with the slab pour average being approximately 100m3 per pour, which would mean that once a week we will 10 concrete wagons on turn around delivering concrete for a section of floor slab.

All other deliveries for the superstructure & fit out works will be delivered via standard 2 axeled goods vehicles or small lorries with a weigh range of between 3.5 and 20 Tonnes we would expect on average no more than 4 on average per day for the duration of the project works, in addition to this we would expect 1 delivery per day for segregated waste which will be collected via a 3 axeled 30 tonne large lorry. As described above all these delivery vehicles will be managed by Wilson James the larger vehicles will be walked / banked to the Mace site from the logistic area whereby the smaller will be un-loaded within the logistics area and distributed by Wilson James to the Mace construction site via fork lift with the assistance of a banks man, these deliveries will be organised to arrive during normal delivery hours of 8:00am and 6:00pm or as stipulated by Wilson James to avoid pedestrian / traffic congestion.

b. Please provide details of other developments in the local area or on the route.

Delivery Route Plan

Plan View of Other Projects in Vicinity

c. Please outline the system that is to be used to ensure that the correct vehicle attends the correct part of site at the correct time.

There will be only one Wilson James and Mace logistic gates for entry and exit therefore there should be no confusion from incoming delivery vehicles on which gate to approach. Entry times and location are specified in CMP and Traffic and Logistic at the tender stage and this is re-affirmed

d. Please identify the locations of any off-site holding areas (an appropriate location outside the borough may need to be identified, particularly if a large number of delivery vehicles are expected) and any measures that will be taken to ensure the prompt admission of vehicles to site in light of time required for necessary compliance checks. Please refer to question 5 if any parking bay suspensions will be required for the holding area.

The logistic holding area is managed and controlled by Wilson James, it's positioned in Gordon Square and Endsleigh Street which has had prior agreement with the London Borough of Camden. Part of this logistic management process is to have an off-site holding area this is position on the outskirts of London provided and managed by Wilson James.

e. Please provide details of any other measures designed to reduce the impact of associated traffic (such as the use of construction material consolidation centres).

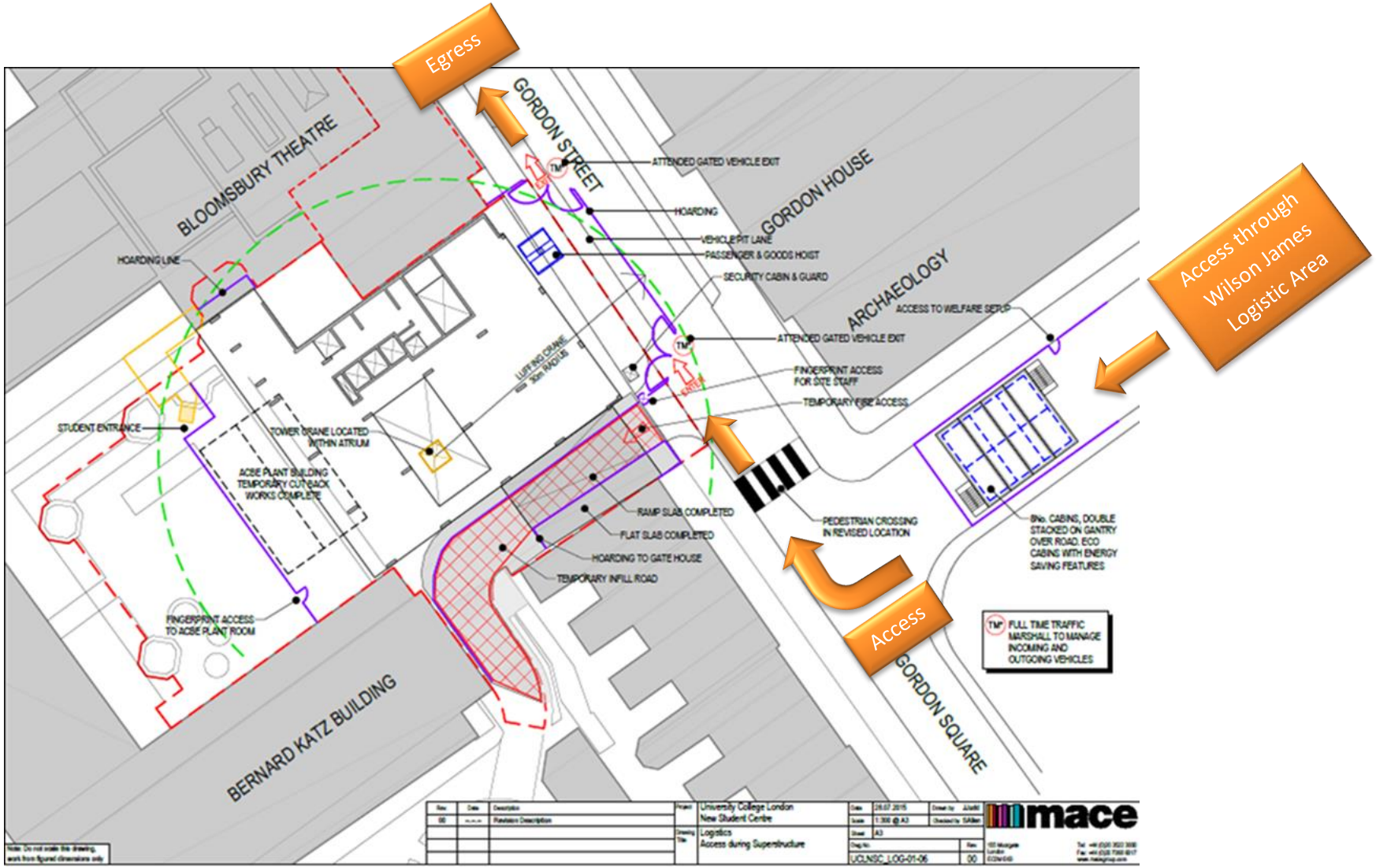
Construction material consolidation will be managed in two ways by just in time deliveries organised by Mace's supply chain sub-contractors and a consolidation centre supplied by Wilson James which is a warehouse positioned outside of London where materials can be called off when required.

6. Site access and egress: "*Clients shall ensure that access to and egress from the site is appropriately managed, clearly marked, understood and clear of obstacles.*" (P18, 3.4.3)

Vehicles entering and leaving the site should be carefully managed, using gates that are clearly marked and free from obstacles. Traffic Marshalls must ensure the safe passage of pedestrians, cyclists and other traffic when vehicles are entering and leaving site, particularly if reversing.

a. Please detail the proposed access and egress routes to and from the site

Proposed access route for vehicles delivering plant or materials are shown overleaf showing entrance and egress routes.


Egress
GORDON STREET
BLOOMSBURY THEATRE
HOARDING LINE
ATTENDED GATED VEHICLE EXIT
HOARDING
VEHICLE PIT LANE
PASSENGER & GOODS HOIST
SECURITY CABIN & GUARD
GORDON HOUSE
ARCHAEOLOGY
ACCESS TO WELFARE SETUP
ATTENDED GATED VEHICLE EXIT
FINGERPRINT ACCESS FOR SITE STAFF
TEMPORARY FIRE ACCESS
LUFFING CRANE 30m RADIUS
TOWER CRANE LOCATED WITHIN ATRIUM
STUDENT ENTRANCE
ACSE PLANT BUILDING TEMPORARY CUT BACK WORKS COMPLETE
RAMP SLAB COMPLETED
FLAT SLAB COMPLETED
HOARDING TO GATE HOUSE
TEMPORARY INFILL ROAD
PEDESTRIAN CROSSING IN REVISED LOCATION
FINGERPRINT ACCESS TO ACSE PLANT ROOM
BERNARD KATZ BUILDING
Access
GORDON SQUARE
8No. CABINS, DOUBLE STACKED ON GANTRY OVER ROAD. ECO CABINS WITH ENERGY SAVING FEATURES
TMP FULL TIME TRAFFIC MARSHALL TO MANAGE INCOMING AND OUTGOING VEHICLES
Access through Wilson James Logistic Area
University College London
New Student Centre
Logistics
Access during Superstructure
UCLNSC_LOG-01-06
mace

Camden

b. Please describe how the access and egress arrangements for construction vehicles will be managed.

As described previously all vehicles entering site will be under the control of UCL logistics company Wilson James as well as Mace's logistics team they will organise site deliveries via an online booking service. When delivery vehicles arrive in the Wilson James logistics area they will be booked in and checked for CLOC's and either walked over via 2 number banksmen to Mace's main gates or the vehicle will be un-loaded by Wilson James operatives and then taken over to Mace's main gates via fork lift with 2 banksmen in attendance. On entering the main construction gates responsibility for the delivery will change from Wilson James to Mace who will have 1 traffic marshal manning the entry gate and 1 traffic marshal manning the exit gate, Mace will also have a security guard manning the pedestrian gate. Vehicles will leave the construction site under supervision of Mace's dedicated exit gate banksman.

c. Please provide swept path drawings for any tight manoeuvres on vehicle routes to and from the site including proposed access and egress arrangements at the site boundary (if necessary).

Not Applicable

d. Provision of wheel washing facilities should be considered if necessary. If so, please provide details of how this will be managed and any run-off controlled.

Mace feel that there will be a requirement for wheel washing facilities especially during the construction of the basement, although the incoming vehicles will theoretically not be driving on muddy roads Mace will be installing a priority / demountable wheel washing facility on the exit gate for this period of the programme, once the groundwork's are complete Mace intend to use a mobile jet wash positioned at both gates to wash vehicles wheels and keep the roads clean, this will be supplemented by a road sweeper as and when required. Mace for the early work will rely on a mobile jet wash to clean the wheels of any vehicles.

7. Vehicle loading and unloading: *"Clients shall ensure that vehicles are loaded and unloaded on-site as far as is practicable."* (P19, 3.4.4)

If this is not possible, Traffic Marshalls must ensure the safe passage of pedestrians, cyclists and motor traffic in the street when vehicles are being loaded or unloaded.

Please provide details of the parking and loading arrangements for construction vehicles with regard to servicing and deliveries associated with the site (e.g. delivery of materials and plant, removal of excavated material). This is required as a scaled site plan, showing all points of access and where materials, skips and plant will be stored, and how vehicles will access and egress the site. If loading is to take place off site, please identify where this is due to take place and outline the measures you will take to ensure that loading/unloading is carried out safely. Please outline in question 8 if any parking bay suspensions will be required.

All plant and materials will be unloaded within the confines of site hoarding at either at the Wilson James logistic compound or the Mace site Compound and as discussed above the gates and vehicle movements will be managed and co-ordinated by trained banksmen who will ensure safe passage for vehicles, pedestrians and cyclists. Generally materials will be unloaded and transported by a mobile or tower crane from the unloading area and a hoist will also be used to transport men and materials vertically. A plan showing general layout is shown on page 46.

Highway interventions

- **8. Parking bay suspensions and temporary traffic management orders**

Please note that a parking bay suspension should only be requested where absolutely necessary. Parking bay suspensions are permitted for a maximum of 6 months, suspensions whose duration exceeds 6 months must apply for a Temporary Traffic Order (TTO). For parking bay suspensions of one year or longer, a Traffic Management Order (TMO) must be applied for.

Please provide details of any proposed parking bay suspensions and temporary traffic management orders which would be required to facilitate construction.

Information regarding parking suspensions can be found here.

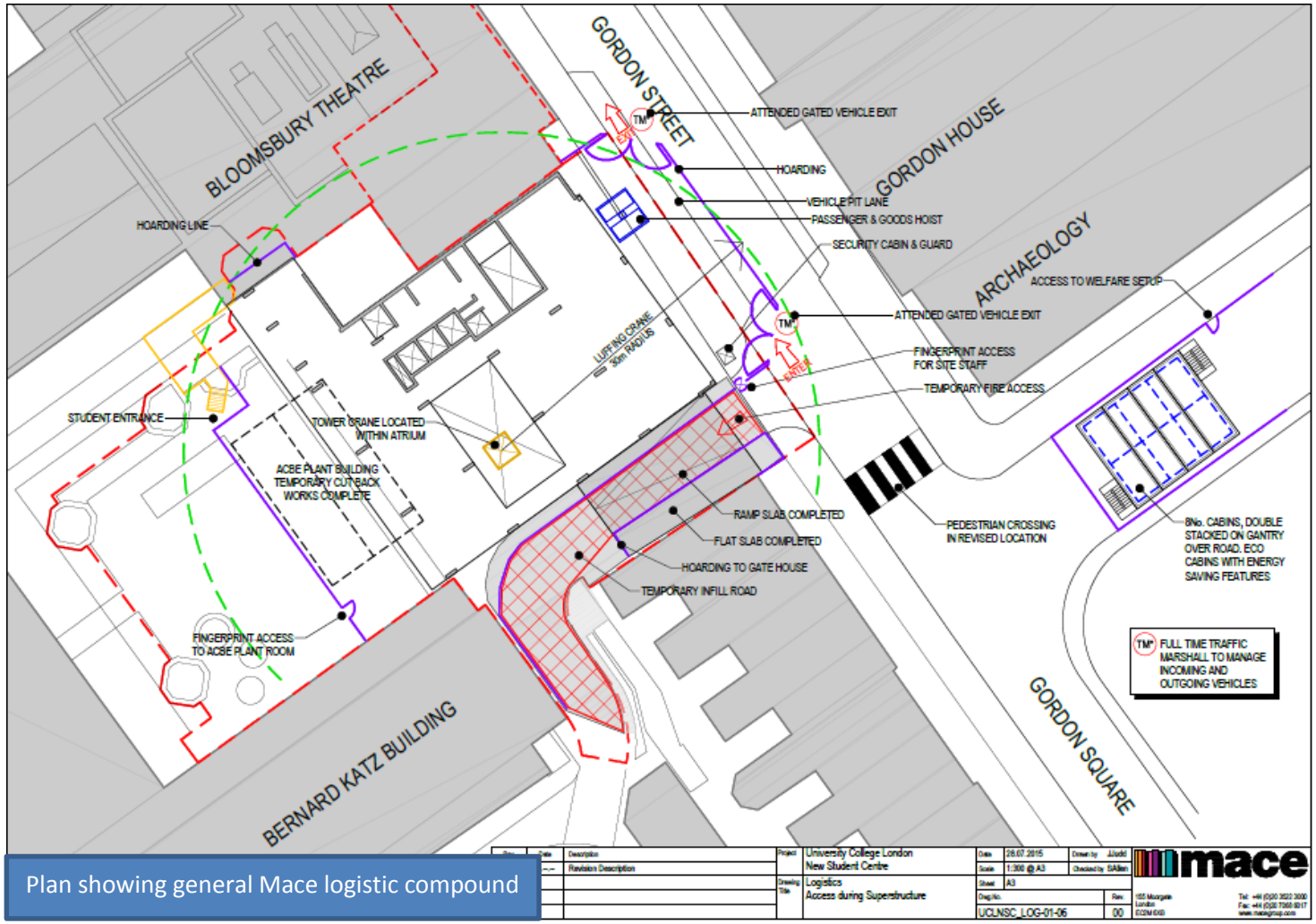
Parking bay suspension / one carriage way closure will be required as indicated on enclosed plan, it is also anticipated that one way system be incorporated for traffic running south on Gordon Street. It is also intended as part of the logistics that Mace supply a temporary zebra crossing to transfer pedestrians travelling south along Gordon Street to avoid the construction works.

9. Scaled drawings of highway works

Please note that use of the public highway for storage, site accommodation or welfare facilities is at the discretion of the Council and is generally not permitted. If you propose such use you must supply full justification, setting out why it is impossible to allocate space on-site. You must submit a detailed (to-scale) plan showing the impact on the public highway that includes the extent of any hoarding, pedestrian routes, parking bay suspensions and remaining road width for vehicle movements. We prefer not to close footways but if this is unavoidable, you should submit a scaled plan of the proposed diversion route showing key dimensions.

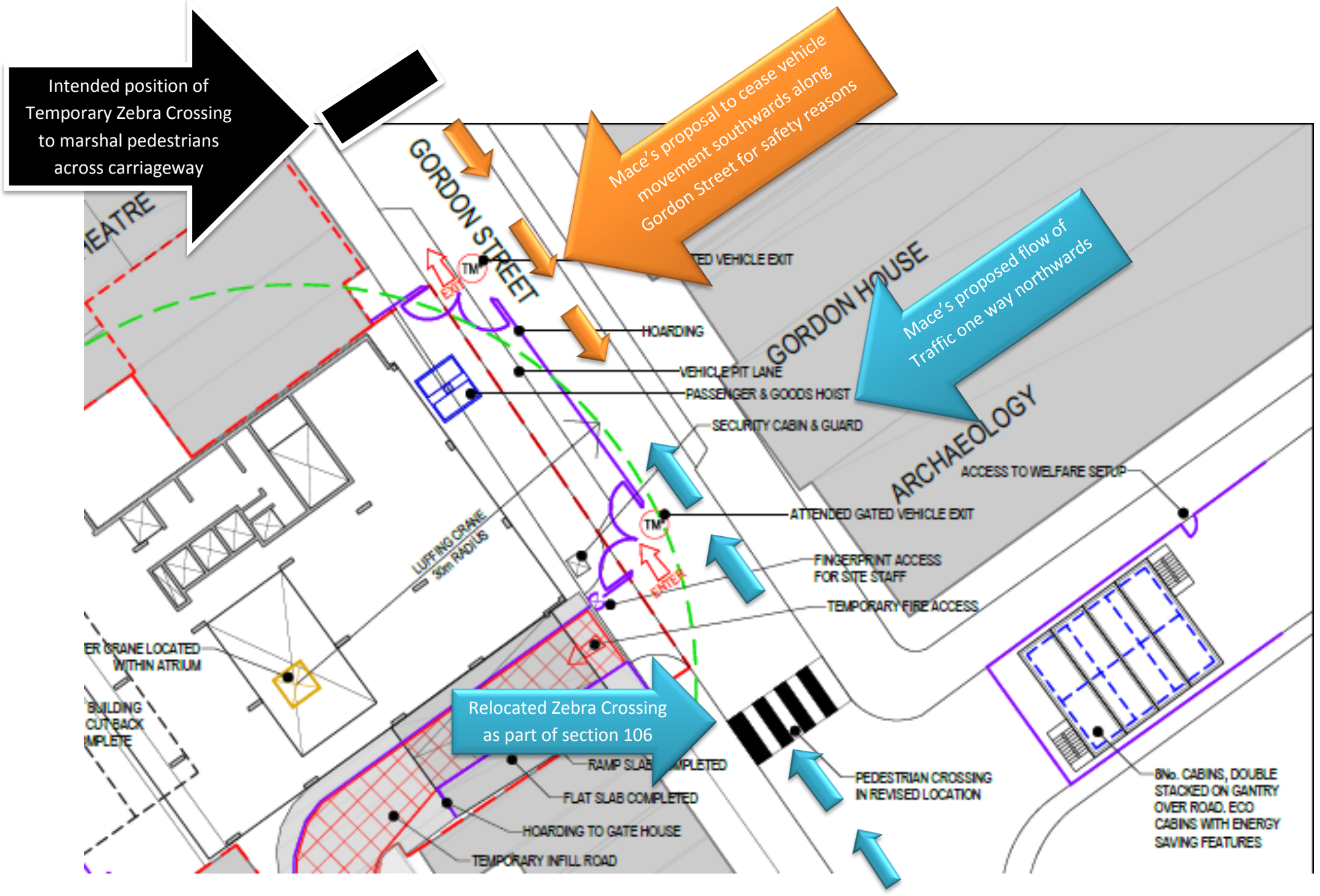
- a. Please provide accurate scaled drawings of any highway works necessary to enable construction to take place (e.g. construction of temporary vehicular accesses).

  As can be seen from the plan drawing shown over leaf the footprint of the new development encapsulates the whole area between 15 and 26 Gordon Street there is no space available for storage of materials, vehicle parking or site welfare units and as such Mace will have no option but to apply for a road closure to half the carriageway. Our proposal would be to use both the pedestrian footpath and half of the carriageway throughout the duration of the development as storage area and safe vehicle movement.

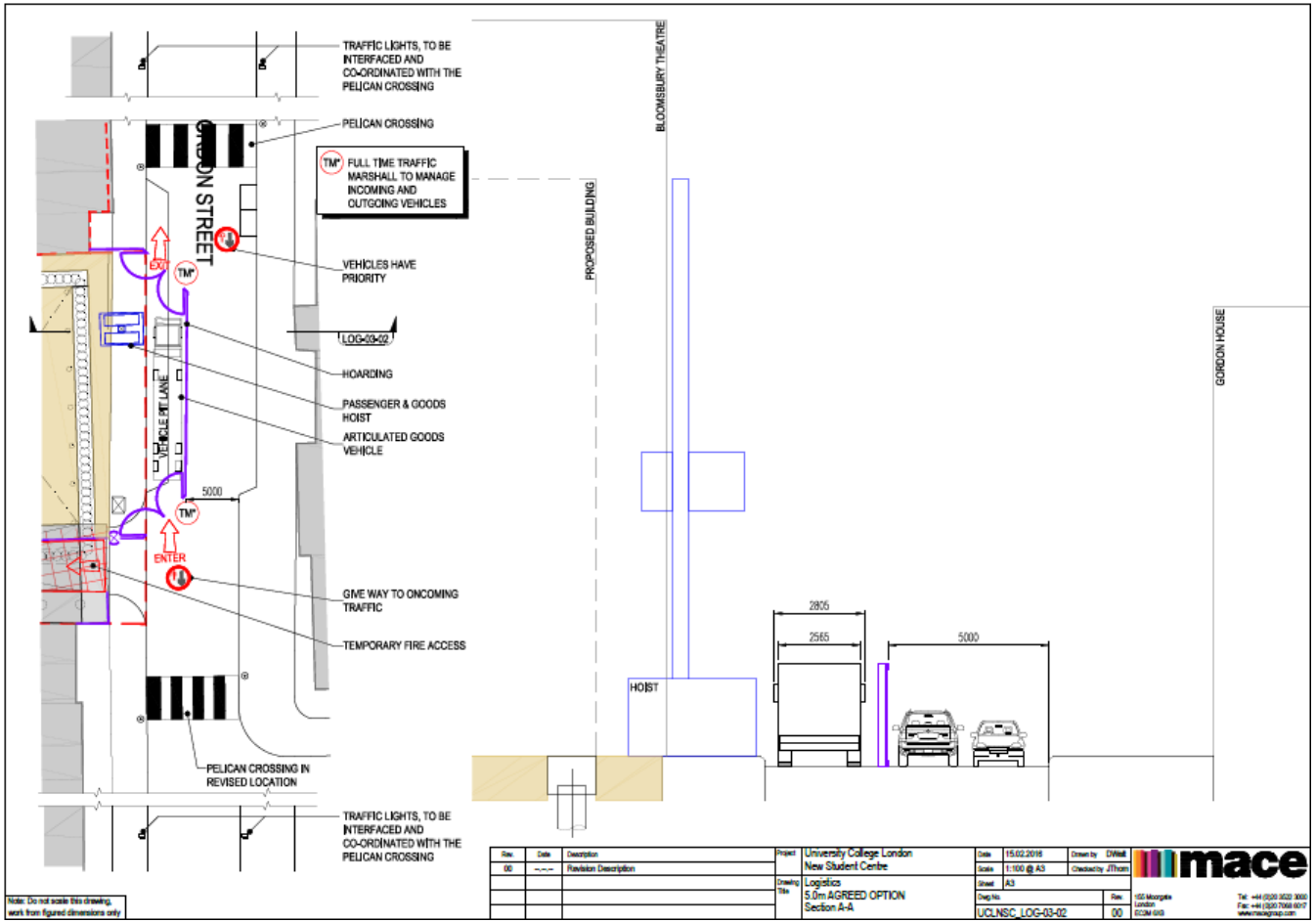


Plan showing general Mace logistic compound

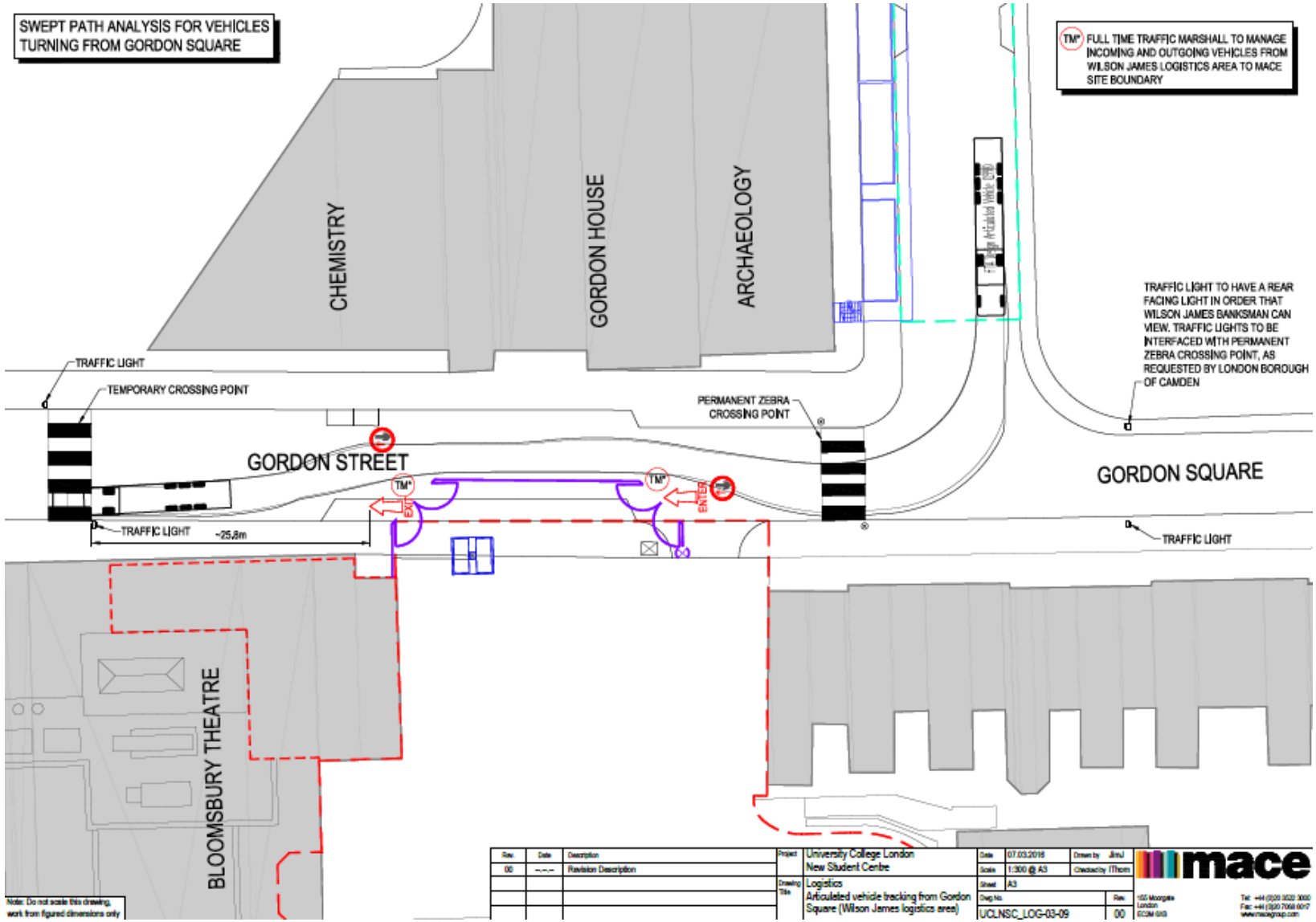
Camden


Intended position of Temporary Zebra Crossing to marshal pedestrians across carriageway
[redacted]
Mace's proposal to cease vehicle movement southwards along Gordon Street for safety reasons
Mace's proposed flow of Traffic one way northwards
GORDON STREET
GORDON HOUSE
ARCHAEOLOGY
EATRE
TED VEHICLE EXIT
EXIT
HOARDING
VEHICLE PIT LANE
PASSENGER & GOODS HOIST
SECURITY CABIN & GUARD
ACCESS TO WELFARE SETUP
ATTENDED GATED VEHICLE EXIT
ENTER
FINGERPRINT ACCESS FOR SITE STAFF
TEMPORARY FIRE ACCESS
LUFFING CRANE 30m RADIUS
ER CRANE LOCATED WITHIN ATRIUM
BUILDING CUTBACK MPLETE
Relocated Zebra Crossing as part of section 106
RAMP SLAB MPLETED
FLAT SLAB COMPLETED
HOARDING TO GATE HOUSE
TEMPORARY INFILL ROAD
PEDESTRIAN CROSSING IN REVISED LOCATION
8No. CABINS, DOUBLE STACKED ON GANTRY OVER ROAD. ECO CABINS WITH ENERGY SAVING FEATURES

Camden


TRAFFIC LIGHTS, TO BE INTERFACED AND CO-ORDINATED WITH THE PELICAN CROSSING
PELICAN CROSSING
GORDON STREET
TM* FULL TIME TRAFFIC MARSHALL TO MANAGE INCOMING AND OUTGOING VEHICLES
VEHICLES HAVE PRIORITY
LOG-03-02
HOARDING
PASSENGER & GOODS HOIST
ARTICULATED GOODS VEHICLE
VEHICLE SET LANE
5000
EXIT
ENTER
GIVE WAY TO ONCOMING TRAFFIC
TEMPORARY FIRE ACCESS
PELICAN CROSSING IN REVISED LOCATION
TRAFFIC LIGHTS, TO BE INTERFACED AND CO-ORDINATED WITH THE PELICAN CROSSING
BLOOMSBURY THEATRE
PROPOSED BUILDING
GORDON HOUSE
HOIST
2805
2565
5000
Note: Do not scale this drawing, work from figured dimensions only
Project: University College London New Student Centre
Drawing Title: Logistics 5.0m AGREED OPTION Section A-A
Dwg No: UCLNSC_LOG-03-02
Rev: 00
mace

Camden


SWEPT PATH ANALYSIS FOR VEHICLES TURNING FROM GORDON SQUARE
TM* FULL TIME TRAFFIC MARSHALL TO MANAGE INCOMING AND OUTGOING VEHICLES FROM WILSON JAMES LOGISTICS AREA TO MACE SITE BOUNDARY
CHEMISTRY
GORDON HOUSE
ARCHAEOLOGY
TRAFFIC LIGHT TO HAVE A REAR FACING LIGHT IN ORDER THAT WILSON JAMES BANKSMAN CAN VIEW. TRAFFIC LIGHTS TO BE INTERFACED WITH PERMANENT ZEBRA CROSSING POINT, AS REQUESTED BY LONDON BOROUGH OF CAMDEN
TRAFFIC LIGHT
TEMPORARY CROSSING POINT
PERMANENT ZEBRA CROSSING POINT
GORDON STREET
GORDON SQUARE
TM*
EXIT
TM*
ENTER
TRAFFIC LIGHT ~25.8m
TRAFFIC LIGHT
BLOOMSBURY THEATRE
Note: Do not scale this drawing, work from figured dimensions only
Rev. Date Description
00 --.--.-- Revision Description
Project University College London New Student Centre
Drawing Title Logistics Articulated vehicle tracking from Gordon Square (Wilson James logistics area)
Date 07.03.2018 Drawn by JimJ
Scale 1:300 @ A3 Checked by IThom
Sheet A3
Dwg No. UCLNSC_LOG-03-09 Rev. 00
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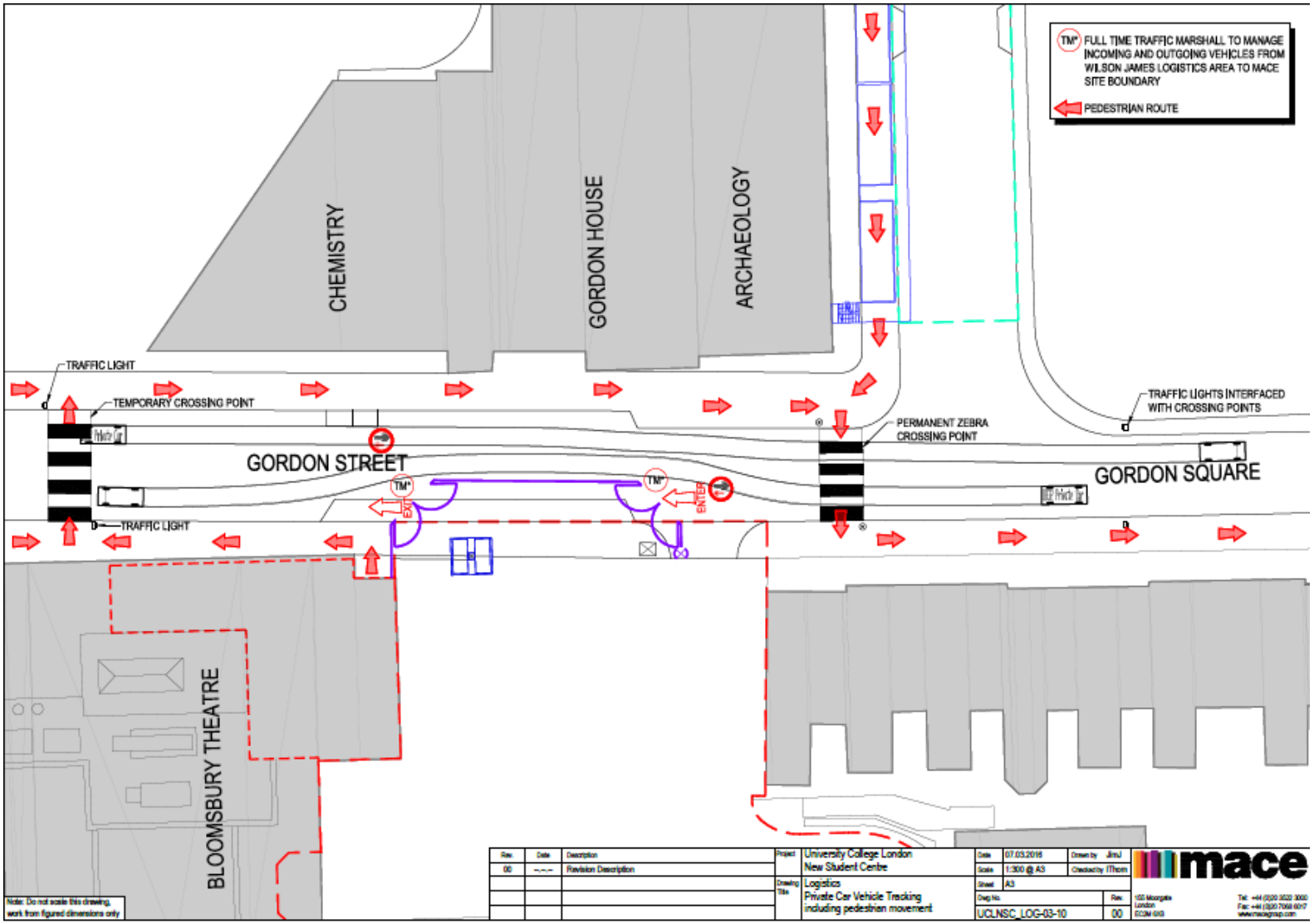
Camden


TM* FULL TIME TRAFFIC MARSHALL TO MANAGE INCOMING AND OUTGOING VEHICLES FROM WILSON JAMES LOGISTICS AREA TO MACE SITE BOUNDARY
PEDESTRIAN ROUTE
CHEMISTRY
GORDON HOUSE
ARCHAEOLOGY
TRAFFIC LIGHT
TEMPORARY CROSSING POINT
GORDON STREET
TRAFFIC LIGHT
PERMANENT ZEBRA CROSSING POINT
TRAFFIC LIGHTS INTERFACED WITH CROSSING POINTS
GORDON SQUARE
BLOOMSBURY THEATRE
University College London
New Student Centre
Logistics
Private Car Vehicle Tracking including pedestrian movement
UCLNSC_LOG-03-10
mace

Camden

The plan on the previous page is a blown up version of the main site logistic set up, it shows the proposed hoarding line including access and egress gates positioned on the carriageway.

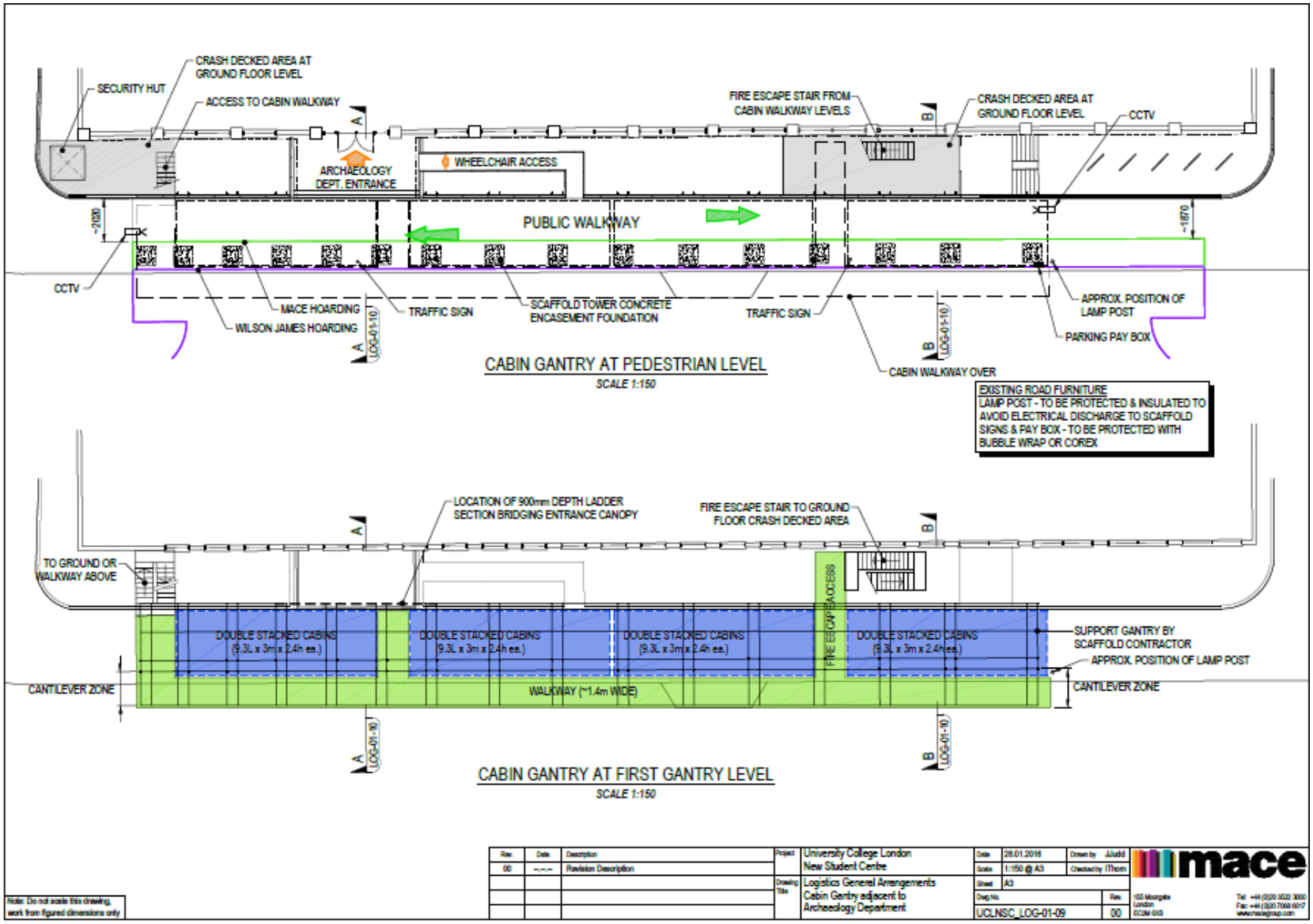
All vehicles delivering materials or plant to the project will enter the site via the Wilson James logistics layout area situated at Gordon Square their access will be managed by trained banksmen either employed by Wilson James or Mace, site operatives will use the pelican / zebra crossing when accessing site from the welfare set up situated along Gordon Square as can be seen on the plan overleaf.

Local vehicular traffic, cyclists and pedestrians will be managed through a set of traffic lights interfaced with a Permanent / Temporary crossing point, positioned to the North and South of the Site along Gordon Street as shown on the plan overleaf. Vehicles and cyclist will be stopped short of Gordon Square junction south side of the site on Gordon Street and also at a mid-point at Bloomsbury Theatre on Gordon Street. The crossing points will be interfaced with the traffic lights allow pedestrians to cross the road safely and in practical terms forms a three way signal arrangement. Mace feel that this system will be appropriate considering the light traffic encountered on Gordon Street.

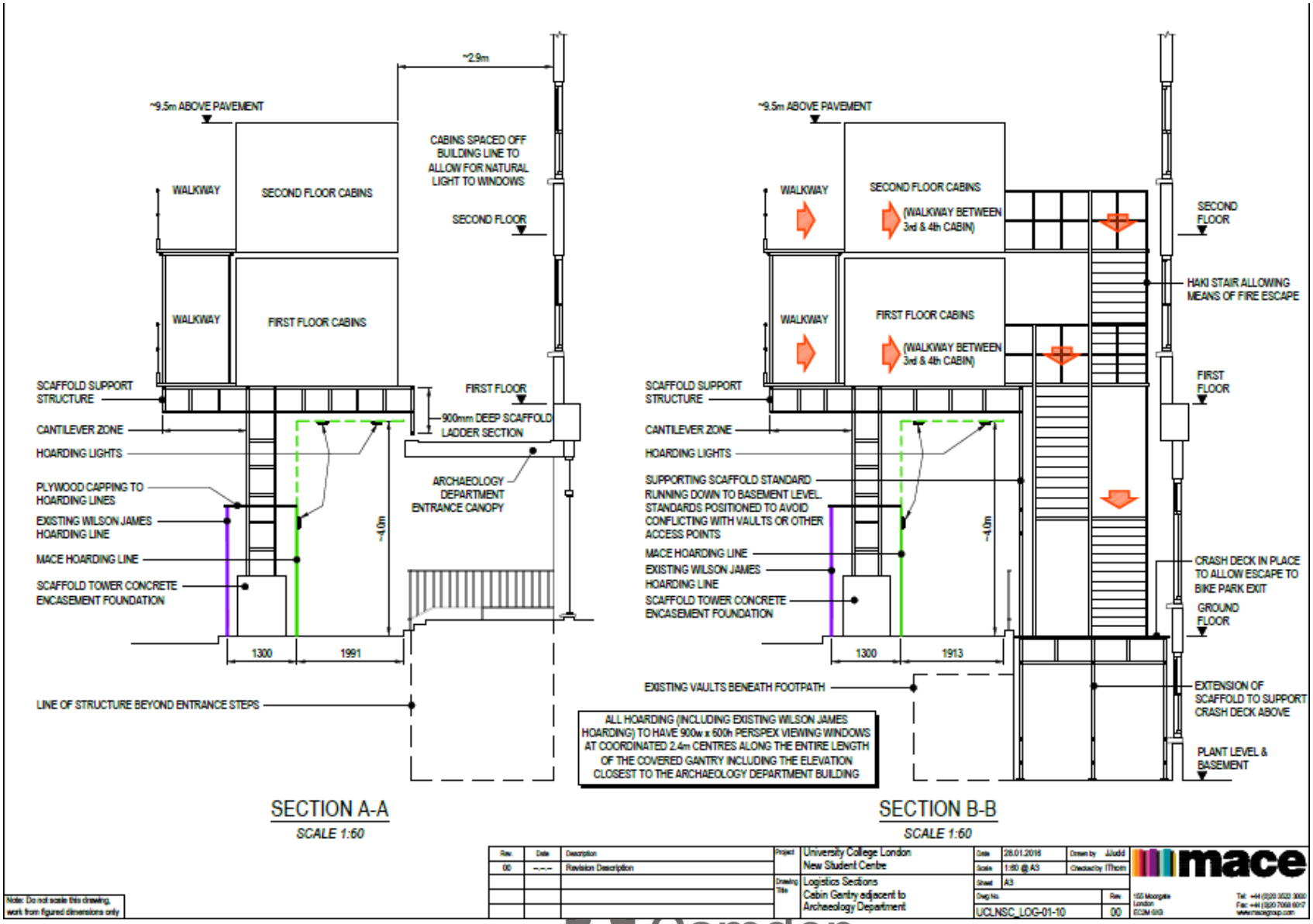
Part of the section 106 works will be the movement of the existing zebra crossing which is positioned in line with the new development, it will be relocated to the position as shown on the plans which will allow pedestrians to cross the carriageway safely from one side to another.

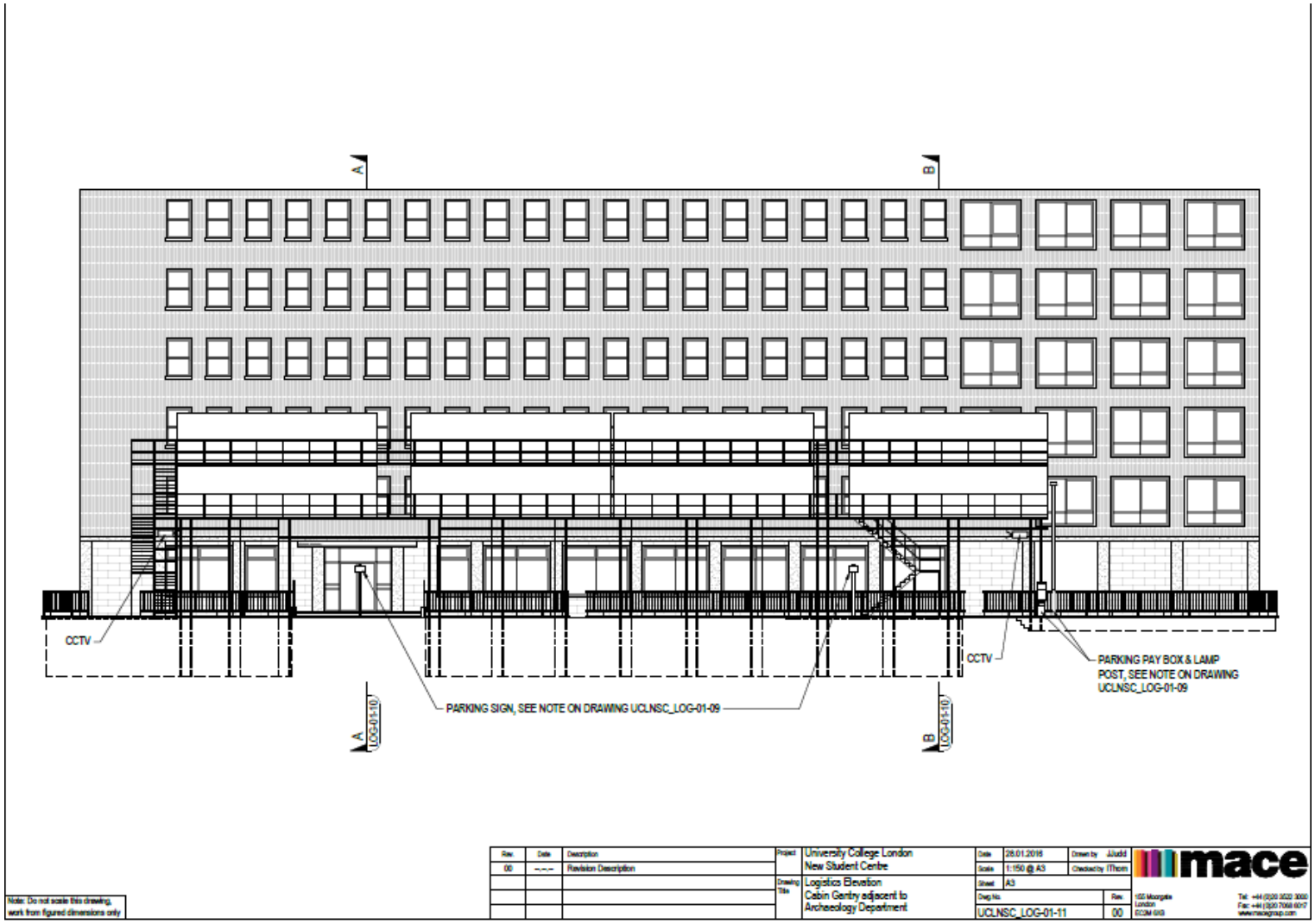
Welfare & office arrangements for the main works will be located as shown on the plans overleaf they will be positioned over the pedestrian footpath on Gordon Square on gantry which running along the boundary line of UCL's Archaeology building.

Early works are simpler as the demolition zone is housed within the campus and there will be no change to the normal running of the campus as shown below.


CRASH DECKED AREA AT GROUND FLOOR LEVEL
SECURITY HUT
ACCESS TO CABIN WALKWAY
ARCHAEOLOGY DEPT. ENTRANCE
WHEELCHAIR ACCESS
FIRE ESCAPE STAIR FROM CABIN WALKWAY LEVELS
CRASH DECKED AREA AT GROUND FLOOR LEVEL
CCTV
PUBLIC WALKWAY
~2000
~1870
CCTV
MACE HOARDING
WILSON JAMES HOARDING
TRAFFIC SIGN
SCAFFOLD TOWER CONCRETE ENCASEMENT FOUNDATION
TRAFFIC SIGN
APPROX. POSITION OF LAMP POST
PARKING PAY BOX
CABIN WALKWAY OVER
LOG-01-10
CABIN GANTRY AT PEDESTRIAN LEVEL
SCALE 1:150
EXISTING ROAD FURNITURE
LAMP POST - TO BE PROTECTED & INSULATED TO AVOID ELECTRICAL DISCHARGE TO SCAFFOLD SIGNS & PAY BOX - TO BE PROTECTED WITH BUBBLE WRAP OR COREX
LOCATION OF 900mm DEPTH LADDER SECTION BRIDGING ENTRANCE CANOPY
FIRE ESCAPE STAIR TO GROUND FLOOR CRASH DECKED AREA
TO GROUND OR WALKWAY ABOVE
DOUBLE STACKED CABINS (9.3L x 3m x 2.4h ea.)
DOUBLE STACKED CABINS (9.3L x 3m x 2.4h ea.)
DOUBLE STACKED CABINS (9.3L x 3m x 2.4h ea.)
FIRE ESCAPE ACCESS
DOUBLE STACKED CABINS (9.3L x 3m x 2.4h ea.)
SUPPORT GANTRY BY SCAFFOLD CONTRACTOR
APPROX. POSITION OF LAMP POST
CANTILEVER ZONE
WALKWAY (~1.4m WIDE)
CANTILEVER ZONE
LOG-01-10
CABIN GANTRY AT FIRST GANTRY LEVEL
SCALE 1:150
Rev. 00
Date --.--.--
Description Revision Description
Project University College London New Student Centre
Drawing Title Logistics General Arrangements Cabin Gantry adjacent to Archaeology Department
Date 28.01.2016
Drawn by JJudd
Scale 1:150 @ A3
Checked by ITherm
Sheet A3
Dwg No. UCLNSC_LOG-01-09
Rev. 00
mace
Note: Do not scale this drawing, work from figured dimensions only

Camden


~2.9m
~9.5m ABOVE PAVEMENT
WALKWAY
SECOND FLOOR CABINS
CABINS SPACED OFF BUILDING LINE TO ALLOW FOR NATURAL LIGHT TO WINDOWS
SECOND FLOOR
WALKWAY
FIRST FLOOR CABINS
FIRST FLOOR
SCAFFOLD SUPPORT STRUCTURE
900mm DEEP SCAFFOLD LADDER SECTION
CANTILEVER ZONE
HOARDING LIGHTS
ARCHAEOLOGY DEPARTMENT ENTRANCE CANOPY
PLYWOOD CAPPING TO HOARDING LINES
EXISTING WILSON JAMES HOARDING LINE
~4.0m
MACE HOARDING LINE
SCAFFOLD TOWER CONCRETE ENCASEMENT FOUNDATION
1300
1991
LINE OF STRUCTURE BEYOND ENTRANCE STEPS
SECTION A-A
SCALE 1:60
~9.5m ABOVE PAVEMENT
WALKWAY
SECOND FLOOR CABINS
(WALKWAY BETWEEN 3rd & 4th CABIN)
SECOND FLOOR
HAKI STAIR ALLOWING MEANS OF FIRE ESCAPE
WALKWAY
FIRST FLOOR CABINS
(WALKWAY BETWEEN 3rd & 4th CABIN)
FIRST FLOOR
SCAFFOLD SUPPORT STRUCTURE
CANTILEVER ZONE
HOARDING LIGHTS
SUPPORTING SCAFFOLD STANDARD RUNNING DOWN TO BASEMENT LEVEL. STANDARDS POSITIONED TO AVOID CONFLICTING WITH VAULTS OR OTHER ACCESS POINTS
~4.0m
MACE HOARDING LINE
EXISTING WILSON JAMES HOARDING LINE
SCAFFOLD TOWER CONCRETE ENCASEMENT FOUNDATION
CRASH DECK IN PLACE TO ALLOW ESCAPE TO BIKE PARK EXIT
GROUND FLOOR
1300
1913
EXISTING VAULTS BENEATH FOOTPATH
EXTENSION OF SCAFFOLD TO SUPPORT CRASH DECK ABOVE
PLANT LEVEL & BASEMENT
ALL HOARDING (INCLUDING EXISTING WILSON JAMES HOARDING) TO HAVE 900w x 600h PERSPEX VIEWING WINDOWS AT COORDINATED 2.4m CENTRES ALONG THE ENTIRE LENGTH OF THE COVERED GANTRY INCLUDING THE ELEVATION CLOSEST TO THE ARCHAEOLOGY DEPARTMENT BUILDING
SECTION B-B
SCALE 1:60
Rev
Date
Description
00
Revision Description
Project
University College London
New Student Centre
Drawing Title
Logistics Sections
Cabin Gantry adjacent to Archaeology Department
Date
28.01.2016
Drawn by
JUudd
Scale
1:60 @ A3
Checked by
IThom
Sheet
A3
Dwg No.
UCLNSC_LOG-01-10
Rev
00
mace
Note: Do not scale this drawing, work from figured dimensions only


A
B
CCTV
PARKING SIGN, SEE NOTE ON DRAWING UCLNSC_LOG-01-09
CCTV
PARKING PAY BOX & LAMP POST, SEE NOTE ON DRAWING UCLNSC_LOG-01-09
A LOG-01-10
B LOG-01-10
Note: Do not scale this drawing, work from figured dimensions only
Rev. 00
Date --.--.--
Description Revision Description
Project University College London New Student Centre
Drawing Title Logistics Elevation Cabin Gantry adjacent to Archaeology Department
Date 28.01.2016
Drawn by JJudd
Scale 1:150 @ A3
Checked by TThorn
Sheet A3
Dwg No. UCLNSC_LOG-01-11
Rev. 00
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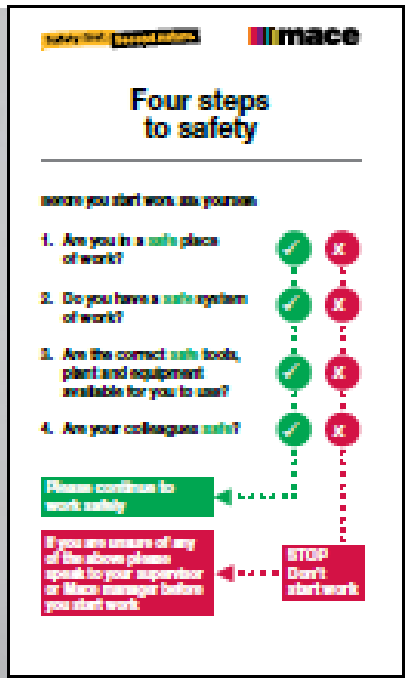
b. Please provide details of all safety signage, barriers and accessibility measures such as ramps and lighting etc.

Safety signage will displayed on the hoarding and hoarded gates examples are as shown below, UCL have specific branding for the hoarding. Barriers will only be used if the entrance gates cannot be closed this scenario is not envisaged however if this does happen the barriers will be under the control of trained banksmen marshalling the gates however.



Entrance into the gates will be a straight forward there are no gradients or ramps, Mace will have spot lights positioned on the gates for visibility and the hoarding will have hoarding lights mounted on them.

10. Diversions

Where applicable, please supply details of any diversion, disruption or other anticipated use of the public highway during the construction period (alternatively a plan may be submitted).

A plan for the diversions is as shown on page 46. As explained in the previous sections we propose to –

1. *Divert / cease vehicles entering Gordon Street moving south from Gower Place / Endsleigh Gardens with the permission of The London Borough of Camden.*
2. *Divert pedestrians from using the footpath along Gordon Street at the site boundary at the Bloomsbury Theatre side.*
3. *Establish part carriageway closure to Gordon Street to allow for logistics and safe vehicle and cycle transportation.*
4. *Propose road closures to erect and dismantle the tower crane.*
5. *Propose road closure for the completion of the roof once tower crane has been removed.*

11. VRU and pedestrian diversions, scaffolding and hoarding

Pedestrians and/or cyclist safety must be maintained if diversions are put in place. Vulnerable footway users should also be considered, these include wheelchair users, the elderly, those with walking difficulties, young children, those with prams, the blind and partially sighted. Appropriate ramping must be used if cables, hoses, etc. are run across the footway.

Any work above ground floor level may require a covered walkway adjacent to the site. A licence must be obtained for scaffolding and gantries. The adjoining public highway must be kept clean and free from obstructions. Lighting and signage should be used on temporary structures/skips/ hoardings, etc.

A secure hoarding will generally be required to the site boundary with a lockable access

a. Please provide details describing how pedestrian and cyclist safety will be maintained, including any proposed alternative routes (if necessary), and any Traffic Marshall arrangements.

Mace will install a solid timber hoarding and gates at the perimeter to provide a security barrier for cyclist, pedestrians and vehicle these will be controlled by trained traffic marshals on both entry and exit gates from on-going construction activities. Mace's safety policy champions CLOC's for cycle safety in and around their construction sites, for the new student Mace strongly feels that the south running carriageway running along Gordon Street is closed down for vehicles making Gordon Street one way running North purely for the safety of cycles as the road is on London Borough of Camden's main cycles routes. The installation of a temporary zebra crossing will cater for level transition for the elderly those with difficulties.

b. *Please provide details of any temporary structures which would overhang the public highway (e.g. scaffolding, gantries, cranes etc.) and details of hoarding requirements or any other occupation of the public highway.*

Temporary structures will include for plywood hoardings and gates to segregate cycles, vehicle and pedestrian at the interface. There will be a monoflex scaffold to the perimeters of the elevation works at Gordon Street and fan for protection of pedestrians and vehicles where required.. A gantry is proposed at Gordon Square for the installation of the temporary welfare setup.

- SYMBOL IS FOR INTERNAL USE

Environment

To answer these sections please refer to the relevant sections of **Camden's Minimum Requirements for Building Construction (CMRBC).**

1. Please list all noisy operations and the construction method used, and provide details of the times that each of these are to be carried out.

    1. *Demolition – Controlled concrete breaking and floor slab utilising small plant and machinery. Time slot (8:00am to 6:00)*
    2. *Piling – Bored Piles. Time Slot (8:00am to 6:00)*
    3. *Basement Formation – Excavator and Cart Away. Time Slot (8:00 to 6:00)*
    4. *Ground Works, Drainage – Excavator and Cart Away. Time Slot (8:00 to 6:00)*
    5. *Frame Construction - Concrete Pouring & Reinforcing Bars (8:00 to 6:00)*
    6. *Steelwork – Impact noise from erection. Time Slot (8:00 to 6:00)*
    7. *Cladding Construction – Mechanical fixing (8:00 to 6:00)*
    8. *External Works – Hard Landscaping to Front Elevation (8:00 to 6:00)*

2. Please confirm when the most recent noise survey was carried out (before any works were carried out) and provide a copy. If a noise survey has not taken place please indicate the date (before any works are being carried out) that the noise survey will be taking place, and agree to provide a copy).

    At the time of writing the CMP no background noise levels have been undertaken by Mace as a principle contractor however an Arup Baseline Noise Survey has been undertaken by the client UCL which the proposed action trigger levels have been calculated. Mace are currently in the process of procuring Cadna a File noise, vibration and dust monitors which are planned to be in position by the Christmas break of 2015 for recording back ground noise.

    The proposed start date for the early works demolition phase is Monday 29th February 2015, Mace will issue the back ground noise survey before this commencement date.

3. Please provide predictions for noise and vibration levels throughout the proposed works.

The following proposed action levels have been determined on the basis of Arup's Baseline Noise Survey's around the perimeter of the site as recommended in building bulletin 93 "

The action levels serve as a trigger point against which to assess the noise impact on the surrounding premises.

Noise

The following table presents proposed action trigger levels for noise emissions from demolition and construction activities at openable windows of nearby buildings.

Proposed Noise Action Trigger Level (db re 2.0 x 10-5 Pa)	
During Exam Periods	Outside of Exam Periods
65db	75db

Vibration

The following table presents proposed vibration action trigger levels in occupied buildings.

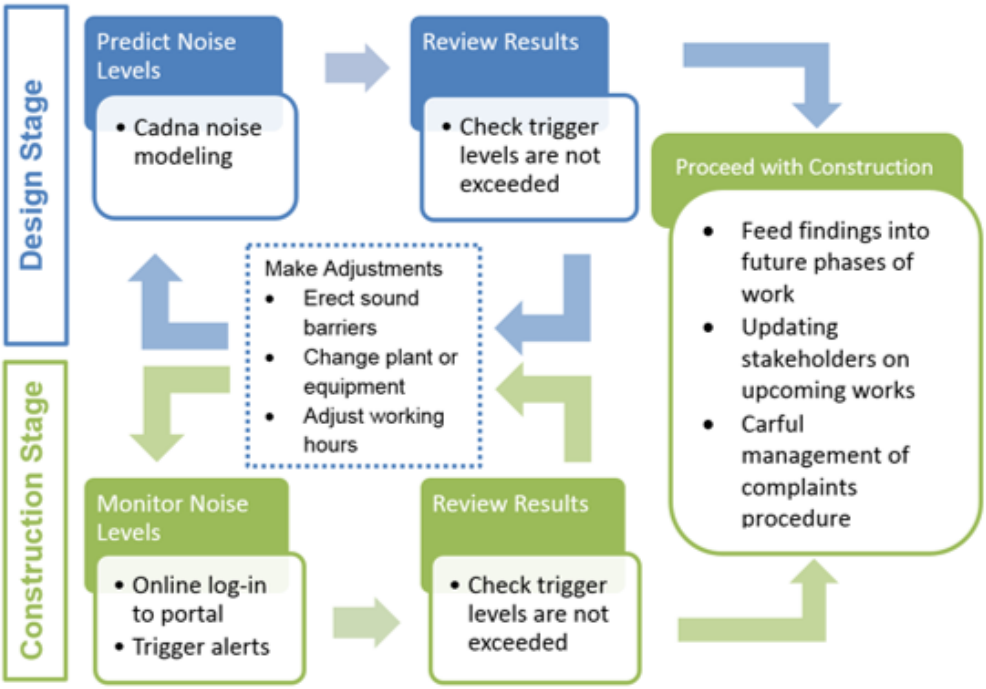
Proposed Vibration Action Trigger Levels		
Parameter	During Exam Periods	Outside
VDV(ms-1.75)	0.4	0.8
PPV (mm-1)	1.0	

4. Please provide details describing mitigation measures to be incorporated during the construction/ demolition works to prevent noise and vibration disturbances from the activities on the site, including the actions to be taken in cases where these exceed the predicted levels.

Cadna A file(Computer Aided Noise Abatement) noise and vibration monitors will be used by Mace as a monitoring tool for noise and vibration, the software enables construction methods and works activities to be inputed to calculate noise levels, these monitors will be used prior to works commencing to record the surrounding existing back ground noise levels which will enable Mace to monitor the daily noise and vibration levels on the construction site on a daily basis during the construction phase. The monitoring units will provide automated alerts via text messages or e /mails to the Mace management team at pre-set levels with the view of quickly dealing with a potential problem efficiently before the trigger levels are activated.

Mace will ensure there is a proactive management of noise and vibration through every phase of the project, we will go through a rigorous process to keep excessive noise as low

as possible using the best and most practicable means possible not only during the construction phase but also during pre-construction phase as well. The diagram below identifies the processes that Mace intend to implement through the life cycle of the project.



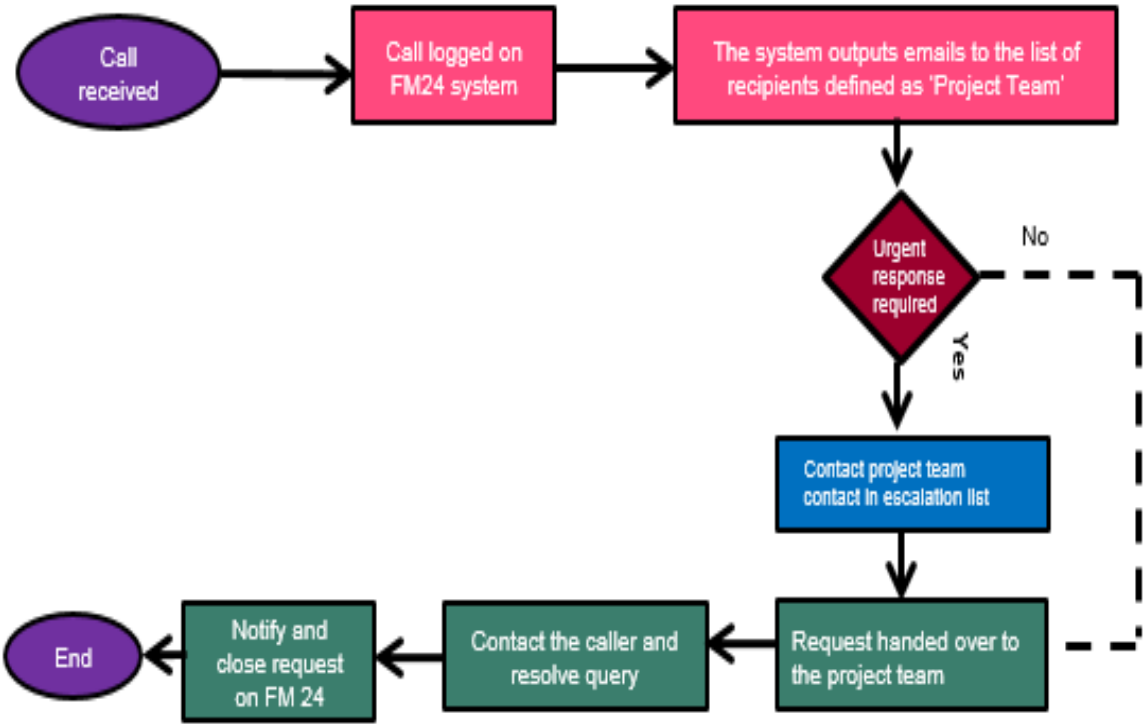
Part of Mace's is strategy to control the nuisance of noise and vibration will be to eliminate it through the planning process. Mace will constantly review noisy works on a regular basis not only during the construction phase but also during the pre-construction phase by planning its works giving due consideration to the academic calendar thus minimising noise by its elimination at sensitive times thus reducing disruption to the local residents in and around the campus. Not only will Mace plan to minimise noise and vibration levels using planning it will also use the design process to identify quieter means of construction, this process was implemented in the decision making process of the piling technique to be used on the project and the use of inclinometers in its design / construction and we will also be using pre-fabrication as a method of noise reduction.

During the demolition phase and construction stages noise will be kept to a minimum by ensuring that all plant is of a modern type with quite operating and exhaust systems. All equipment will have engine covers down at all times and be maintained through planned preventative maintenance.

To ensure noise and vibration impacts are kept to a minimum the following control measures will be implemented as necessary –

1. *All demolition works will be undertaken by plant using hydraulic powered demolition crushing attachments.*
2. *Work requirements will be identified along with time scales in order that information gathered can be advised to all parties concerned.*
3. *All plant and equipment will be fully serviced and maintained in good working order.*
4. *Where and if necessary for use compressors and generators will be of a super silenced type.*
5. *All key personnel will be issued with site radios for communication.*
6. *Sounding of horns on site will be strictly forbidden, unless in an emergency.*
7. *All plant and equipment will be effectively silenced and located in areas of the site to minimise noise levels off site to sensitive areas.*
8. *The demolition of the building will be undertaken with the correct specified plant as to minimise vibration.*
9. *Loading of waste transporters carrying arising waste or materials shall be carried out utilizing the smallest drop possible to reduce impact noise and vibration.*
10. *The noise emissions from each item of plant or work activity shall not exceed the re – agreed noise permitted levels and relevant EC directive.*
11. *Electrical plant is to be used wherever possible e.g. electric compressor etc.*
12. *Additional shielding or silencing will be used where applicable.*
13. *Where necessary plant will be reversed under guidance of banks man to negate the need for audible warnings.*
14. *Compressors shall be fitted with properly lined and sealed acoustic covers, which shall be kept and closed whenever the machines are in use.*
15. *The best practical means shall be employed at all locations to reduce noise and vibration.*
16. *Reduced traffic movements off site as the majority of the demolition arisngs will be used onsite as back fill materials.*

Part of the mitigation strategy from Mace will be the efficient running of a communication and complaints process giving key stakeholders advice and guidance on the trigger levels in and also provide transparency, we feel that communication process will be important and a fortnightly neighbourhood liaison meeting with the local residents will be managed and chaired by Mace with a view of dealing with likely problem before they become an issue. Any complaints be logged within our in house help line FM 24 / 7 with all complaints being issued to the relevant Project Manager and Community Engagement Manager for further discussion within 24 hours with the view of agreeing a manageable solution to the problem, the key processes are outlined overleaf in a flow chart.



5. Please provide evidence that staff have been trained on BS 5228:2009

Mace as a principle contractor has a responsibility to train their staff in all aspects of Health and Safety. The project specific training matrix has been attached as an appendix with this document. As part of Mace H&S training all operational staff are required to have attended a 5 day CITB SMSTS course, as well as this Mace's supply chain site supervisors will have been trained to a minimum CITB SSSTS. As well as this all staff and operatives will hold a Construction Skills Certificate Scheme for each of their works discipline. All the above training schemes include for training on the British Standards BS 5228:2009 Code of practice for noise and vibration control on open sites.

The management and control of noise & vibration will be developed from the recommendations of the risk assessment carried out by "Air Quality Consultants" based on the GLA's Guidance, these recommendations will be developed to mitigate the effects of noise and vibration in the specific project risk assessment and method statements for each work activity these will be communicated to the work force during their induction process on site, these processes will be supplemented by toolbox talks training when required.

6. Please provide details on how dust nuisance arising from dusty activities, on site, will be prevented.

Mace will be supplying temporary water and electricity on site for their sub-contractors' use. Mace's methods of work for mitigating dust on site will be driven initially by reducing the nuisance at source by choosing the correct methods of works, for the demolition of the Node for example the methodology will be for the building to taken apart in piecemeal fashion section by section by small plant / machinery rather than utilising large plant / machinery thus reducing the break out of dust, from this stage dust will be controlled through the demolition, sub-structure and super structure phase via water suppression via lances either hand help or mounted on trips, all stone cutting tools will have water suppression attached. In regard to roads and logistic areas dust will be controlled via the use of jet wash which will be supplied on the front and rear access gates in addition to this there will be an allowance made for a visit by a road sweeper as and when required.

Internally dust will be supressed initially by the correct selection of plant and equipment and the use of natural ventilation of spaces when cutting. When cutting / grinding / or planning stone or timber products each piece of plant will have extraction physically attached, this whole process will risk assessed and incorporated into job specific method statements with the use of PPE being the last resort.

7. Please provide details describing how any significant amounts of dirt or dust that may be spread onto the public highway will be prevented and/or cleaned.

Housekeeping forms an integral part of Mace's five points to safety campaign and it forms a huge part in keeping control of general dirt or dust on construction sites, initially each of Mace's sub-contractors will have a daily responsibility to clear and make tidy their works areas of all waste material, these waste products will be deposited into segregation waste bins on each floor, the waste from this point will be managed by a logistic company who will remove the segregated waste from site, its envisaged that waste will be collected on a daily basis in order to control the break out of dust and dirt, it will be logistics company's responsibility to sweep all surfaces and damped down areas with water internally and externally as required to keep dust to the minimum.

Externally at the hoarding interface Mace will have two jet washes positioned at the vehicle entrance and exit gates, each gate will be manned by a banksman and it will be this banksman responsibility to sweep these areas clean and make sure that surfaces are swept free of dust, in addition to this a road sweeper will be used as and when required to keep the main carriageways free of dust via water suppression and extraction.

8. Please provide details describing arrangements for monitoring of noise, vibration and dust levels.

The monitors will be purchased by Mace from a specialist sound and vibration consultant "John Campbell Associates" part of this purchase agreement will be advice on their position within the project as well as their installation. The construction method and plant used for each works activity is input into the software to calculate noise levels, if levels are exceeded adjustments will be made to the onsite construction methodology. Data from all monitors will be collected and stored remotely and will have on-line access to live monitoring data streaming with visible traffic light systems which can be viewed with pre-arranged agreement from Mace. Data information gained form the monitors if necessary can be made available to the London Borough of Camden. The Monitors for noise and dust will be –

1. *3 Number NOR-140-CA-2050 – Noise Monitoring Terminal*
2. *3 Number AVA-INS200014 –Ava Trace M60 Vibration logger*
3. *3 Number AVA-INS200013B-PM-3Dx Triaxial Geophone for M60*

9. Please confirm that a Risk Assessment has been undertaken at planning application stage in line with the GLA's Control of Dust and Emissions Supplementary Planning Guidance (SPG), and the risk level that has been identified, with evidence. Please attach the risk assessment as an appendix if not completed at the planning application stage.

Prior to the planning application stage UCL commissioned an independent report on the existing air quality conditions as described and using the results of monitoring carried out by London Borough of Camden, information by Defra and the Environment Agency. The report was undertaken by Air Quality Consultants Ltd, 12 Airedale Road, London, SW12 8SF.

Summary of the Risk Assessment is as set below

The potential dust impacts arising due the construction phase have been assessed following guidance issued by the GLA, taking into account the sensitivity of the local area and the nature and duration of the works. The operational impacts have been assessed qualitatively, concentrations have been compared with air quality objectives set by the Government to protect human health.

During construction phase it will be necessary to apply mitigation measures to minimise dust emissions. The IAQM guidance makes clear that, with the mitigation measures in place, the overall impacts during construction will not be significant.
The existing conditions within the study area shown to be acceptable air quality, with concentrations all below the air quality objectives relevant for this scheme. The proposed development will not generate any additional traffic or energy plant emissions and thus will not affect air quality at existing properties. The operational impacts are therefore negligible. The proposed development has also been shown to be better than air quality

neutral. Overall, the construction and operational air quality impacts of the proposed development are judged not to be significant. Relevant extracts from the Construction Phase Impact Assessment are as shown overleaf.

5 Construction Phase Impact Assessment

5.1 The construction works will give rise to a risk of dust impacts during demolition, earthworks and construction, as well as from trackout of dust and dirt by vehicles onto the public highway. Initially, a large external brick and concrete staircase will need to be demolished. This will then be followed by piling and excavation of the basement, prior to construction of the new building. Overall, the construction period is expected to last approximately two and a half years.

Potential Dust Emission Magnitude

Demolition

5.2 There will be a requirement to demolish the large external brick and concrete staircase to the rear of the Bloomsbury Theatre, which is programmed to take around 6 months. The total volume of buildings to be demolished is approximately 100 m^3. Although the volume of building to be demolished is fairly small, the staircase is 22m high and a mobile crusher will be used on site which will increase the risk of dust impacts. Based on the example definitions set out in Table A2.1, the dust emission class for demolition is considered to be *medium*.

Earthworks

5.3 The characteristics of the soil at the development site have been defined using the British Geological Survey's UK Soil Observatory website (British Geological Survey, 2015), as set out in Table 5.

Table 5: Summary of Soil Characteristics

Category	Record
Soil layer thickness	Deep
Soil Parent Material Grain Size	Arenaceous[a] – Rudaceous[b]
European Soil Bureau Description	River terrace sand/gravel
Soil Group	Light (Sandy) to Medium (Sandy)
Soil Texture	Sandy to Sandy Loam[c]

[a] grain size 0.06 – 2.0 mm.

[b] grain size > 2.0 mm.

[c] a loam is composed mostly of sand and silt.

5.4 Overall, it is considered that, when dry, this soil has the potential to be moderately dusty.

5.5 The site covers some 900 m^2 which will be subject to earthworks, involving breaking up of a paved area and excavation of the basement, which will require approximately 8,000 m^3 of material to be removed. The earthworks will last around 4 months and dust will arise mainly from the handling of dusty materials. Based on the example definitions set out in Table A2.1, the dust emission class for earthworks is considered to be *medium*.

Construction

5.6 Construction will involve erection of a reinforced concrete frame insitu, with brickwork and precast concrete cladding. Dust will arise from the handling and storage of dusty materials, and from the cutting of concrete. The construction will take place over a 15-month period. Based on the example definitions set out in Table A2.1, the dust emission class for construction is considered to be *medium*.

Trackout

5.7 The number of vehicles accessing the site, which may track-out dust and dirt is currently unknown. A high volume of vehicle movements off site may be generated during the demolition, piling and excavation phases. However, given the size and nature of the site it is unlikely that many will travel over unpaved ground. Based on the example definitions set out in Table A2.1, the dust emission class for trackout is considered to be *small*.

5.8 Table 6 summarises the dust emission magnitude for the proposed development.

Table 6: Summary of Dust Emission Magnitude

Source	Dust Emission Magnitude
Demolition	Medium
Earthworks	Medium
Construction	Medium
Trackout	Small

Sensitivity of the Area

5.9 This assessment step combines the sensitivity of individual receptors to dust effects with the number of receptors in the area and their proximity to the site. It also considers additional site-specific factors such as topography and screening, and in the case of sensitivity to human health effects, baseline PM_{10} concentrations.

Sensitivity of the Area to Effects from Dust Soiling

5.10 The IAQM guidance, upon which the GLA's guidance is based, explains that residential properties are 'high' sensitivity receptors to dust soiling (Table A2.2). The university buildings are also

considered to be of 'high' sensitivity to dust soiling. There are a number of university buildings within 20 m of the site, including the Bloomsbury Theatre, Wilkins and Bernard Katz buildings and offices in Gordon Square. The chemistry and nanotechnology buildings are approximately 20m and 40m respectively from the site (see Figure 1). Using the matrix set out in Table A2.3, the area surrounding the onsite works is of 'high' sensitivity to dust soiling. Table 6 shows that dust emission magnitude for trackout is 'small' and Table A2.3 thus explains that there is a risk of material being tracked 50 m from the site exit. Since it is not known which roads construction vehicles will use, it has been assumed that vehicles could turn either left or right onto Gordon Street. The Bloomsbury Theatre, the chemistry and nanotechnology buildings, Gordon House, and offices on Gordon Square, as well as part of Gordon Square itself are within 20 m of the roads along which material could be tracked (see Figure 2), and Table A2.3 thus indicates that the area is of 'high' sensitivity to dust soiling due to trackout. Taking these points into account, it is judged that the areas surrounding the onsite works and surrounding roads along which material may be tracked from the site are of 'high' sensitivity to dust soiling (Table 7).

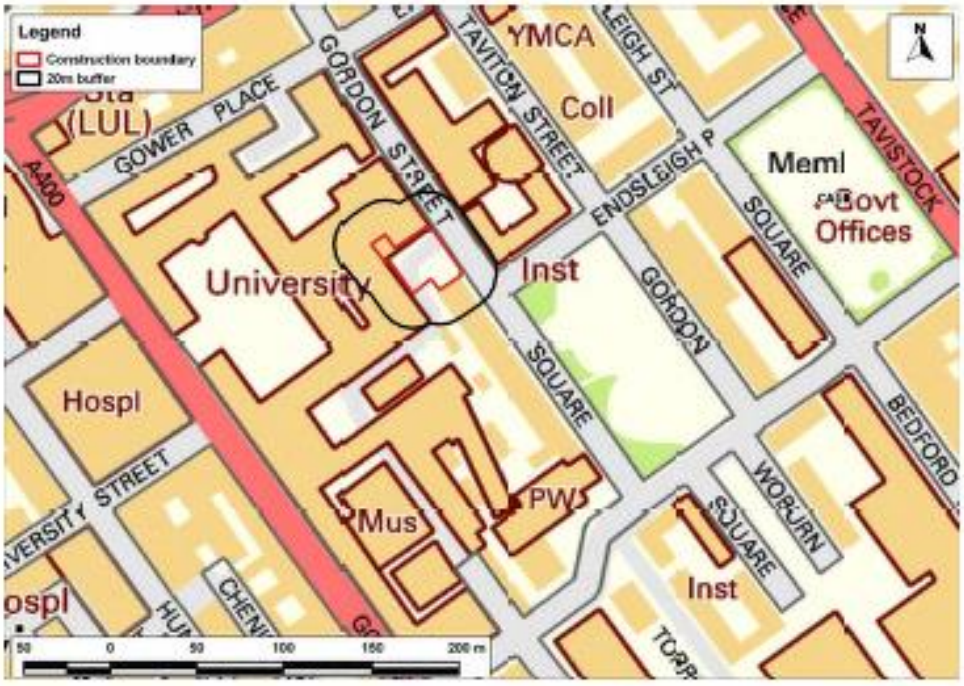


Figure 1: 20 m Distance Band around Construction Area

Figure 2: 20 m Distance Band around Roads Used by Construction Traffic Within 50m of the Site Exit

Sensitivity of the Area to any Human Health Effects

5.11 The university buildings are also classified as being of 'high' sensitivity to human health effects. The matrix in Table A2.4 requires information on the baseline annual mean PM_{10} concentration in the area. It is considered that the measured PM_{10} concentration at the Bloomsbury urban background monitoring site in Table 3 will best represent conditions near to the site. Using the matrix in Table A2.4, the area surrounding the onsite works and surrounding roads along which material may be tracked from the site are of 'medium' sensitivity to human health effects (Table 7).

Sensitivity of the Area to any Ecological Effects

5.12 The guidance only considers designated ecological sites within 50 m to have the potential to be impacted by the construction works. There are no designated ecological sites within 50 m of the site boundary or those roads along which material may be tracked, thus ecological impacts will not be considered further.

Table 7: Summary of the Area Sensitivity

Effects Associated With:	Sensitivity of the Surrounding Area	
	On-site Works	Trackout
Dust Soiling	High Sensitivity	High Sensitivity
Human Health	Medium Sensitivity	Medium Sensitivity

Risk and Significance

5.13 The dust emission magnitudes in Table 6 have been combined with the sensitivities of the area in Table 7 using the matrix in Table A2.6 in Appendix A2, in order to assign a risk category to each activity. The resulting risk categories for the four construction activities, without mitigation, are set out in Table 8. These risk categories have been used to determine the appropriate level of mitigation as set out in Section 7.

Table 8: Summary of Risk of Impacts Without Mitigation

Source	Dust Soiling	Human Health
Demolition	Medium Risk	Medium Risk
Earthworks	Medium Risk	Medium Risk
Construction	Medium Risk	Medium Risk
Trackout	Low Risk	Negligible

5.14 The IAQM does not provide a method for assessing the significance of effects before mitigation, and advises that pre-mitigation significance should not be determined. With appropriate mitigation in place, the IAQM guidance is clear that the residual effect will normally not be significant (Institute of Air Quality Management, 2014).

6 Operational Phase Impact Assessment

Energy Plant Impacts

6.1 The existing UCL district heating scheme would provide heat to the proposed development. This would make use of existing excess heat and therefore there would be no additional emissions to air as a result of heating the proposed development. Heating the proposed development would therefore have no impact on local air quality.

6.2 The existing CHP and boiler plant that power the district heating scheme are located around the campus. None of the plant are immediately adjacent to the proposed development. In addition, the New Student Centre would be a similar height to the surrounding buildings. On this basis, the impact of existing CHP/boiler plant upon the proposed development is unlikely to be any greater than the impact on any existing buildings in the area.

Road Traffic Impacts

6.3 There would not be any additional car parking associated with the New Student Centre, and therefore no increase in local traffic. On this basis, the proposed development would not have any traffic related air quality impacts.

Impacts on the Development

6.4 Information presented in the Baseline Conditions section indicates that the annual mean nitrogen dioxide objective will be exceeded at the New Student Centre. Although, the 1-hour nitrogen dioxide and PM_{10} objectives are expected to be achieved. As discussed in paragraph 2.19 the New Student Centre would represent relevant exposure for the 1-hour nitrogen dioxide and 24-hour mean PM_{10} objectives but not the annual mean objectives. As the 1-hour and 24-hour objectives will be achieved at the proposed development, the impacts of existing emission sources on air quality for the new occupants of the development is considered to be 'not significant'.

'Air Quality Neutral'

Building Emissions

6.5 Building Emission Benchmarks in terms of emissions of NOx and PM_{10} per m^2 of floor area for various land uses have been set. The benchmarks for Class D1(c) non-residential institutions for education use are 31 g/m^2 for NOx, and 1.78 g/m^2 for PM_{10}. There would be no increase in NOx or PM_{10} emissions due to proposed development and it will thus be better than air quality neutral in terms of building emissions.

Road Transport Emissions

6.6 The Transport Emissions Benchmarks (TEBs) are based on the number of trips generated by different land-use classes, together with the associated trip lengths and vehicle emission rates.

6.7 The New Student Centre would not lead to any increase in emissions of NOX and PM_{10} in the local area. The proposed development will be thus better than air quality neutral in terms of transport emissions.

Air Quality Planning and Checklist

6.8 LB of Camden's Air Quality and Planning Checklist has been completed. The completed checklist is included in Appendix A7.

Significance of Operational Air Quality Impacts

6.9 The operational air quality impacts without mitigation are judged to be *not significant*. This professional judgement is made in accordance with the methodology set out in Appendix A3. It is made on the basis that the development will not lead to an increase in traffic or energy plant emissions in the local area, and the occupants of the building will not be exposed to unacceptable air quality.

10. Please confirm that all of the GLA's 'highly recommended' measures from the SPG document relative to the level of risk identified in question 9 have been addressed by completing the GLA mitigation measures checklist. Please attach this as an appendix.

    The "Air Quality" Risk Assessment is attached as appendix 1 with this document as requested and the sections for construction impacts, residual impacts and its conclusion as attached over leaf for reference.

7 Mitigation

Construction Impacts

7.1 Measures to mitigate dust emissions will be required during the construction phase of the development in order to reduce impacts upon nearby sensitive receptors.

7.2 The site has been identified as a *Medium* Risk site during demolition, earthworks and construction, and *Low* Risk for trackout, as set out in Table 8. The GLA's SPG on *The Control of Dust and Emissions During Construction and Demolition* (GLA, 2014b) describes measures that should be employed, as appropriate, to reduce the impacts, along with guidance on what monitoring that should be undertaken during the construction phase. This reflects best practice experience and has been used, together with the professional experience of the consultant and the findings of the dust impact assessment, to draw up a set of measures that should be incorporated into the specification for the works. These measures are described in Appendix A8.

7.3 The mitigation measures should be written into a dust management plan (DMP). The GLA's guidance suggests that, for a Medium Risk site, automatic monitoring of particulate matter (as PM_{10}) will be required. It also states that, on certain sites, it may be appropriate to determine the existing (baseline) pollution levels before work begins. However, the guidance is clear that the Local Authority should advise as to the appropriate air quality monitoring procedure and timescale on a case-by-case basis.

7.4 Where mitigation measures rely on water, it is expected that only sufficient water will be applied to damp down the material. There should not be any excess to potentially contaminate local watercourses.

Road Traffic Impacts

7.5 The assessment has demonstrated that the scheme will not lead to any increase in traffic emissions. It is not considered appropriate to propose further mitigation measures for this scheme.

7.6 Measures to reduce pollutant emissions from road traffic are principally being delivered in the longer term by the introduction of more stringent emissions standards, largely via European legislation. The Mayor's Air Quality Strategy and Council's Air Quality Action Plan will also be helping to deliver improved air quality.

Good Design and Best Practice Measures

7.7 The proposed development incorporates the following good design and best practice measures, which the EPUK/IAQM guidance advises should be considered whether or not more specific mitigation is required:

- no car parking spaces provided, to discourage the use of private vehicles to access the proposed development;
- provision of cycle parking;
- provision of pedestrian and cycle access through the new development;
- siting of the intake of the mechanical ventilation system at the rear of the building away from any local sources; and
- use of the existing district heating scheme to avoid the need for on-site combustion.

8 Residual Impacts

Construction

8.1 The IAQM guidance is clear that, with appropriate mitigation in place, the residual effect will normally be 'not significant'. The mitigation measures set out in Section 7 and Appendix A7 are based on the IAQM guidance. With these measures in place and effectively implemented the residual effects are judged to be *insignificant*.

8.2 The IAQM guidance does, however, recognise that, even with a rigorous dust management plan in place, it is not possible to guarantee that the dust mitigation measures will be effective all of the time, for instance under adverse weather conditions. During these events, short-term dust annoyance may occur, however, the scale of this would not normally be considered sufficient to change the conclusion that overall the effects will be *insignificant*.

Energy Plant Impacts

8.3 The residual impacts will be the same as those identified in Section 6 (paragraphs 6.1 to 6.2). The impacts of the proposed development will be *negligible*.

Road Traffic Impacts

8.4 The residual impacts will be the same as those identified in Section 6 (paragraphs 6.3). The impacts of the proposed development will be *negligible*.

9 Conclusions

9.1 The construction works have the potential to create dust. During construction it will therefore be necessary to apply a package of mitigation measures to minimise dust emission. With these measures in place, it is expected that any residual effects will be 'not significant'. However, the guidance recognises that, even with a rigorous dust management plan in place, it is not possible to guarantee that the dust mitigation measures will be effective all of the time, for instance under adverse weather conditions. The local community may therefore experience occasional, short-term dust annoyance. The scale of this would not normally be considered sufficient to change the conclusion that the effects will not be significant.

9.2 Air quality is considered to be acceptable in relation to the air quality objectives that are relevant to the proposed use of the site (24-hour and 1-hour means). Annual mean nitrogen dioxide concentrations at the development site are likely to exceed the air quality objective, this is not significant, however, as the proposed use of the building does not represent relevant exposure in terms of the annual mean.

9.3 The proposed development would not increase traffic on local roads and thus the impacts of the development on air quality would be not significant. Heating would be provided by using excess heat from the existing district heating scheme and thus would not have any impact on local air quality.

9.4 The building and transport related emissions associated with the proposed development are both below the relevant benchmarks. The proposed development is (better than air quality neutral) and is thus compliant with Policy 7.14 of the London Plan.

9.5 The LB Camden Air Quality Planning Checklist has been completed and is provided in Appendix A7.

9.6 The overall operational air quality impacts of the development are judged to be not significant. No additional mitigation has been proposed for the operational impacts.

11. If the site is a High Risk Site, 4 real time dust monitors will be required, as detailed in the SPG. Please confirm the location, number and specification of the monitors in line with the SPG and confirm that these will be installed 3 months prior to the commencement of works, and that real time data and quarterly reports will be provided to the Council detailing any exceedances of the threshold and measures that were implemented to address these.

Part of Mace's mitigation as a High Risk site will be to deploy dust tracking monitors, part of our consultants risk assessed report stated that due to the overall size of the development only one monitor was required. The dust receptor is planned to be installed prior to Christmas break with the noise and vibration monitors ready for a demolition start date of the 29th February 2016, form the consultants report

The monitors / equipment used will be –

1. *1 Number AER-DS – Dust Sentry*

The data collected from these monitors will be collated and held on a web site, access can be gained via password the data can be made available to the London Borough of Camden if necessary.

The monitors will all be placed on the site boundary with 2 noise and 2 vibration monitors being positioned at the rear of the building nearest to the most sensitive UCL receptors, one each on each corner with the remaining receptor for noise and vibration being positioned at the front of the site, one at 15 Gordon Street and one at 26 Gordon Street. The sole monitor for dust will be positioned at the front to the site at the corner of 26 Gordon Street.

12. Please provide details about how rodents, including rats, will be prevented from spreading out from the site. You are required to provide information about site inspections carried out and present copies of receipts (if work undertaken).

The new student centre construction site is positioned on an existing part of UCL's live campus and as such there isn't a live rodent problem presently on site. Mace's mitigation for the control of rodents will be to have excellent housekeeping, in and around the welfare area. If a rodent problem comes apparent during the duration of the project Mace's solution to the problem will be to employ a specialist contractor to neutralise the problem.

13. Please confirm when an asbestos survey was carried out at the site and include the key findings.

A Refurbishment and Demolition Survey to Bloomsbury Theatre and to the Node building (one of the building's that is to be demolished in the early phase) was commissioned by

the University College London on Monday 21st September 2015 and was carried out by Lucion Environmental Ltd the report was issued on Thursday 15th October 2015 to UCL..

The report identified that in the Bloomsbury Theatre and Node building Asbestos was found in the positions outlined below.

1. *Pipework Gaskets – Presumed Chrysotile*
2. *General dust to surfaces – Chrysotile*
3. *Hydrant Gaskets – Chrysotile*
4. *Woven Rope to Duct Boxing's - Chrysotile*
5. *Lining Wall Panels – Chrysotile*
6. *Rope packing and gaiter to duct work – Chrysotile*
7. *Pipework sleeves*
8. *Floor covering*
9. *Air vents – Amosite*
10. *Gaskets generally – Chrysotile*
11. *High Level Boxing – Amosite*
12. *Bituminous roof felt to Walls – Chrysotile*

University College London have commissioned Lucion to remove the asbestos as detailed in the R&D report, they in turn are currently in the process of removing all the identified asbestos prior to Mace taking possession of the site.

14. Complaints often arise from the conduct of builders in an area. Please confirm steps being taken to minimise this e.g. provision of suitable smoking area, tackling bad language and unnecessary shouting.

Mace as part of the project execution plan propose to use an in house company called FM24 Helpline to identify and log complaints from members of the public, students, staff members, local authority or any other stakeholder in relation to any site activity. Mace will coordinate a meeting with UCL to identify the most suitable process for responding to these complaints.
To mitigate the amount of complaints from the outset Mace will communicate general site specific and client site rules i.e. bad language, shouting and unauthorized smoking to all sub-contractors through the induction process, if problems are encountered these will be escalated and dealt with via specific tool box talks with the individual or individuals, if the offence is repeated a system of yellow and red cards will be utilised to remedy the problem outright. A smoking shelter will be provided by Mace, it will be positioned out of the public gaze at the rear of the welfare set up on Gordon Square.

SYMBOL IS FOR INTERNAL USE

Agreement

The agreed contents of this Construction Management Plan must be complied with unless otherwise agreed in writing by the Council. This may require the CMP to be revised by the Developer and reapproved by the Council. The project manager shall work with the Council to review this Construction Management Plan if problems arise in relation to the construction of the development. Any future revised plan must be approved by the Council in writing and complied with thereafter.

It should be noted that any agreed Construction Management Plan does not prejudice further agreements that may be required such as road closures or hoarding licences.

Signed: ……

Date: 14th December 2015

Print Name: Ian Thomas

Position: Project Manager

Please submit to: planningobligations@camden.gov.uk

End of form.