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Cathy Molloy
Planning Officer
London Borough of Richmond upon Thames
Civic Centre
York Street
Twickenham
TW1 3BZ

Dear Cathy,

Richmond upon Thames College: Request for a Screening Opinion under Regulation 5 of the Town and County Planning (Environmental Impact Assessment) Regulations 2011 (the EIA Regulations) for the demolition of the Music, Science, Z, LRC and A blocks at Richmond upon Thames College, Twickenham.

I am writing on behalf of Richmond upon Thames College (RuTC) to request an Environmental Impact Assessment (EIA) Screening Opinion of the proposed demolition of the Music, Science, Z, LRC and A blocks at the RuTC site in Twickenham. This site is currently subject to an application for outline planning permission for the proposed Richmond Education and Enterprise Campus (REEC) development. The purpose of the proposed demolition, to which this letter relates, is to enable Phase 1b demolition as early works as part of the REEC development. The Phase 1b demolition is incorporated in the outline planning application, however RuTC intend to request separate planning permission to undertake this demolition to facilitate the REEC programme. The outline planning application for the REEC development was lodged in July 2015 and is currently undergoing determination.

In accordance with Regulation 5 (2) of the EIA Regulations, the following information is provided as part of this request:

1. A plan sufficient to identify the land; and,
2. A brief description of the nature and purpose of the development and of its possible effects on the environment.

The letter also provides additional information (set out below and attached) on the characteristics and location of the development, as well as the characteristics of potential impacts together with reports supporting the conclusions that the proposed works are not EIA development.

As set out below, it is considered that:

- The works are standard demolition works;
- Effects will be temporary and will only affect a localised area around the RuTC site; and
- The proposal does not constitute EIA development.

1 Description of the Site and Location

Figure 1 identifies the site for the proposed works to which this screening opinion request relates. The demolition site comprises numerous academic and facilities buildings associated with RuTC. Staff car parking is located along the eastern side of the site, which will be lost during the demolition works (see Section 3.3.3 for further details).

The southern and western boundary of the demolition site are bordered by existing RuTC buildings which will remain in use throughout the demolition. Hoarding will separate the demolition site from the rest of the college site to ensure segregation between users of the college site and the activities associated with the demolition process. A grass sports pitch is located to the north of the site and will remain in use by RuTC throughout the demolition period. The east of the demolition site is bordered by residential properties.

The works will comprise the removal of 5 building blocks currently used for teaching and administration at RuTC. These are shown on **Attachment 1** and comprise:

- Music block;
- LRC block;
- A block
- Z; and
- Science.

The area of the site is approximately 0.65 ha.

All access to the work site will be via Langhorn Drive (see **Attachment 1**). Entry to the site will be strictly monitored by a banksman and the site manager.

The proposed scope of work is set out below.

2 Nature and Purpose of the Development

The Demolition Method Statement for the proposed works is provided in **Attachment 2**. A summary of the relevant aspects for the purposes of this EIA screening request is provided below.

Asbestos surveys and removal

Asbestos-containing materials (ACMs) identified on the Demolition and Refurbishment survey will be removed in a controlled manner using only licenced and approved specialists who will also serve the relevant notices to HSE if applicable.

There are three categories of asbestos removal; notifiable licensed works, notifiable non-licensed works (NNLW) and non-notifiable asbestos works. All asbestos removal works would be carried out in accordance with The Control of Asbestos Regulations 2012. An individual Plan of Works will be provided by a specialist contractor for notifiable asbestos such as thermal insulation to pipework and associated debris and residue.

All operatives will have received training to recognise ACMs; should any additional ACMs be located within the buildings during demolition, work will cease and the Site Manager notified, an asbestos surveyor will be called to site and a sample taken for testing to confirm, prior to works in that area continuing. If asbestos is found the material will be notified to the Health and Safety Executive and a 14 day notice places to remove under controlled conditions by the demolition contractor using a licensed asbestos removal subcontractor. Once the buildings have been cleared of asbestos (where applicable) and a certificate of reoccupation the demolition will commence.



TWICKENHAM

Legend



Site Boundary



2.4m High Close-Boarded Fence



0m 100m

Note: All locations are approximate
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Contains Ordnance Survey Data

Project Title:

Richmond Upon Thames College: EIA Screening

Figure Title:

Phase 1b Demolition Site Boundary

For Information Only

Figure Number:

Figure 1

Date:

October 2015

Demolition

Demolition will comprise of soft strip (the removal of internal elements such as suspended ceilings, fixtures and fittings, non-load bearing partition walls, doors, door furniture, skirting's and sanitary ware) followed by demolition of the buildings to ground floor slab level.

It is anticipated that the works will take approximately 14 weeks to complete. The works are anticipated to commence in January / February 2016 following the decant of students and staff into alternative accommodation in other buildings on the RuTC site.

Once the buildings have been cleared of asbestos (where applicable) and a certificate of reoccupation has been issued, the internal soft strip works will commence. This is undertaken using hand held tools and an excavator for loading. All soft strip work will be undertaken in accordance with BS6187 – Code of Practice for Demolition Works.

The demolition of the unoccupied buildings will be phased. It is likely that the Music, Science and Z blocks will be demolished first (one building at a time) with LRC and A block being left in place to form an acoustic barrier between the site and the nearby residential dwellings. Approximate durations of demolition works (i.e. also including asbestos survey and removal) per block, within the overall duration of 14 weeks, are:

- Music block - four weeks;
- Science and Z blocks - five weeks;
- LRC - five weeks; and
- A block - 12 weeks.

An exclusion zone around the building and demolition rig will be identified in accordance with BS 6187.

Progressive demolition of the structures will be undertaken. This involves the controlled removal of sections of the structure, whilst retaining stability of the remainder and avoiding collapse of the whole or part of the building. The structures will be divided into bays which are determined by any load bearing element of the structure (e.g. rooms or columns). Each building will be systematically reduced a single structural bay at a time using a 360 degree tracked excavator and demolition rig, working from the top of the structure down (see **Attachment 2**). All brick and concrete arisings will be crushed on site, with all works in full compliance with the NFDC (National Federation of Demolition Contractors) Guidance Notes of the Safe Use of Mobile Crushers in the Demolition Sector. Heras fencing with debris netting will be deployed around the crushing area, and water suppression techniques utilised throughout the entire process (see **Attachment 2** for further details).

Following demolition of the buildings, the ground slab will be removed. The demolition rig will work with a hammer attachment to break the slab into manageable sized sections.

Estimated waste volumes are approximately 8,000 m³. Of the total demolition waste arisings all of the brick and concrete (including brick and concrete from external walls and internal partitions) would be recycled, crushed, graded, with much of the material later re-used on site. The total quantity of demolition waste to be taken off site for reuse, recycling or disposal will therefore be much less than the 8,000 m³, although a precise figure is not available.

On completion of the demolition works the site will be left cleared and levelled. This completes the works that are the subject of this EIA Screening request. No excavation work is proposed as part of the proposed Phase 1b demolition works.

Tree removal

Seventeen scattered, ornamental trees are located within the site for the proposed demolition. These trees will be removed (see Section 3.3.4 *Trees*, for further details).

Environmental Management

Best practice measures, which will be implemented in order to reduce or avoid any potential environmental effects from the proposed demolition activities, are identified in the Demolition Method Statement (see **Attachment 2**). These measures, which are detailed in **Attachment 2**, relate in particular to the control of noise, dust, traffic, waste and ecological effects. Key measures are briefly summarised below:

- **Noise**- A 2.4m high close-boarded fence will be provided which will reduce noise from the proposed demolition to residential properties along Egerton Road. The fence will function as acoustic hoarding and will be located on the site boundary along the rear of 1-33 Egerton Road (refer to **Attachment 1**).
- **Dust**- Dust control measures in accordance with London Best Practice Guidance will be implemented during the proposed demolition.
- **Traffic**- All demolition vehicles will be received at the college site entrance on Langhorn Drive by banksmen who will supervise the vehicles into and out of the demolition site.
- **Waste** - Careful location of stockpiles and other storage areas;
- **Ecology** - Any vegetation clearance will be undertaken outside the breeding bird season (March to August inclusive) or immediately following inspection by a suitably qualified ecologist. Root protection areas for trees outside but immediately adjacent to the Phase 1b site will be demarcated and protected. No dig construction methods will be used near root zones of retained trees.

3 The Need for Environmental Impact Assessment

Department for Communities and Local Government guidance advises that demolition works fall under Schedule 2.10(b) (urban development projects) of the EIA Regulations provided the threshold and criteria for this type of development are met. EIA Screening is not required under the screening thresholds in this case as the area of demolition works is approximately 0.65ha, which falls below the 1.0 hectares threshold. However following discussions with LBRuT, given the close proximity to nearby sensitive receptors (e.g. residents) and the potential for environmental effects relating to the demolition, a screening opinion is being sought.

The duration of the works will be temporary, and the effects of demolition will be transient. The demolition work is confined to an existing built up area of the site.

Having regard to the selection criteria set out in Schedule 3 of the EIA Regulations and the guidance from Circular 02/99, additional information is provided to help inform the Screening decision. This includes information on the characteristics and location of the development, as well as the characteristics of potential impacts.

On the basis of the information provided below and attached, it is not considered that the demolition works constitute EIA development and hence an EIA is not required.

3.1 Characteristics of development

The buildings proposed for demolition are academic and facilities buildings associated with and wholly within the boundary of the existing Richmond upon Thames College.

The works to undertake the demolition of the buildings are temporary in nature although the demolition itself is permanent.

3.2 Location of development

The site is located within the RuTC site, to the north west of Twickenham town centre (see **Figure 1**). It falls within the administrative area of the London Borough of Richmond upon Thames.

The site proposed for demolition is bounded by playing fields to the north, residential properties immediately to the east along Egerton Road, and other RuTC buildings to the south and west.

The site is not within a 'Sensitive Area' as defined by the EIA Regulations and is not covered by any statutory or non-statutory wildlife or heritage designations.

3.3 Characteristics of the potential impact

Preliminary studies to determine the potential significant effects that could arise as a result of the works have been undertaken which inform this EIA screening request for the following topics for which there is potential for environmental effects to arise:

- Noise and vibration;
- Air quality;
- Transport;
- Ecology;
- Townscape and visual amenity;
- Ground conditions; and
- Waste.

The results are summarised below.

3.3.1 Noise and vibration

A preliminary assessment of potentially significant noise effects has been undertaken. This assessment has incorporated all noise control measures included in the demolition scheme, such as the 2.4m high fence which will provide an acoustic barrier. The assessment, which has been informed by the noise assessment reported in the ES for the REEC development, is provided in **Attachment 3**. A summary is provided below.

During the demolition of the Music, Science and Z Blocks noise levels at properties in Egerton Road would be screened by the LRC and A Block buildings resulting in a typical LAeq,10hr of 58dB. This is below the ambient noise level and would have a negligible impact.

Demolition of the LRC and A blocks would result in a noise level of LAeq,10hr 69dB during the demolition of the top floor of the buildings where the screening provided by the 2.4m high fence will be less effective. While this is more than 3dB above ambient it would be for less than eight weeks and is therefore a minor impact. During the demolition of the lower floors the screening would be more effective resulting in a level of LAeq,10hr 63dB at the properties and therefore also classed as a minor impact.

The use of hydraulic breakers for the Phase 1b demolition could result in occasional perceptible levels of vibration at the properties on Egerton Road during the closest approach of the works, although the impact would be minor.

3.3.2 Air quality

A qualitative assessment of potentially significant effects on air quality has been undertaken. This is provided in **Attachment 4**. A summary is provided below.

The prevailing wind is from the west and southwest, therefore receptors to the east and northeast of the active demolition areas, such as residential properties on Egerton Road, are the most likely to experience dust impacts from the site. The magnitude of the dust emission during the demolition phase is considered to be large due to the need for on-site concrete crushing. Taking into account the sensitivity of local receptors, the corresponding risk of dust impacts prior to mitigation is therefore low for health impacts and high for dust soiling impacts.

The close boarded fence to the west of the houses on Egerton Road will provide an effective barrier to dust generated during the demolition phase. In addition, London Best Practice Guidance for dust control (see Section 2, *Dust*), as described in Table 9 of **Attachment 4**, will be implemented, as appropriate, during the demolition phase.

The significance of likely dust impacts on nearby receptors following the implementation of appropriate and best practice environmental control measures is therefore considered to be negligible.

Traffic flows associated with the demolition phase are anticipated to be low and in accordance with Institute of Air Quality Management / Environmental Protection UK screening criteria are unlikely to significantly affect local air quality.

3.3.3 Transport

A preliminary assessment of potentially significant transport effects has been undertaken. This is provided in **Attachment 5**. A summary is provided below.

The demolition works will result in the loss of approximately 20 student and 10 staff motorcycle parking spaces, and 2 student and 25 staff car parking spaces located at the eastern side of the site and accessed from Egerton Road. There is sufficient space within the rest of the college site, particularly on the western side, to provide replacement parking areas to mitigate the loss of staff car and motorcycle parking on the eastern side of the site. Cars will be able to park in existing hardstanding areas without impacting on the movement of delivery and servicing vehicles in these areas. The student car and motorcycle parking spaces lost during the Phase 1b demolition will not be replaced.

The demolition site will generate a total of 14 HGV movements a day i.e. 7 in and 7 out, spread throughout the day. There will also be a total of 10 light vehicle movements a day i.e. 5 in and 5 out.

All demolition traffic will enter and exit the site via Langhorn Drive and the A316 Chertsey Road. Therefore, all demolition traffic will use private roads and the Transport for London's Road Network (TLRN) in the vicinity of the site.

The ES prepared for the wider REEC development concluded no significant adverse effects relating to construction traffic. The effects of the Phase 1b demolition trip generation are considered to be less than the effects the worst case REEC construction phase and it is therefore considered the demolition will not have a significant adverse effect on the local transport network or the local environment in transport terms.

Due to the relatively low number of demolition vehicles, there is sufficient capacity within the Langhorn Drive / A316 junction to accommodate the anticipated level of demolition vehicles.

The effects on the local transport network and the local environment in transport terms are anticipated to be negligible.

3.3.4 Ecology

Habitats

The Phase 1b demolition site is not located within or adjacent to any nationally or European designated sites and is not covered by any local or borough level sites designated for their wildlife interest.

The extended Phase 1 report prepared for the REEC development ES identifies amenity grassland, trees, hedge and scrub within the area subject to this EIA Screening request. The Phase 1 plan from the REEC ES is provided as **Attachment 6**).

Trees

The trees located within the site for the Phase 1b demolition would be removed as part of the Phase 1b works. Details of the trees / groups of trees are provided in **Table 1** below, in an extract from a recent tree survey of the site¹. The location of each tree is provided in **Attachment 7**.

Table 1: Trees located within Phase 1b site

Reference	Species	Physiological condition	Structural condition	Comment
H14	Cyprus	Fair	Fair	Maintained hedgerow providing low level screening
T51	Snowy Mespil	Fair	Poor	Heavily pruned to install scaffold. Unlikely to recover.
T52	Hawthorn	Poor	Poor	Dead
T54	Lime	Good	Good	None
T55	Pine	Good	Good	Stem damage. Root exposure.
G53	Various (3 Alder and 2 Lime)	Good	Good	None
T63	Birch cultivar	Good	Good	Easily replicable in the short term.
T64	Maple cultivar	Good	Fair	Easily replicable in the short term. Included unions.
T65	Birch	Good	Fair	Easily replicable in the short term
T66	Prunus	Good	Fair	Positioned in raised cracked planter.
G67	Snowy Mespil	Fair	Fair	Little arboricultural significance.
G70	Hornbeam	Good	Fair	Group of 2. Minor deadwood. One tree poorly pruned on north side.
Trees adjacent to the Phase 1b demolition site				
G50	Various	Fair	Fair	Offsite group of cherry, holly and cypres
G56	Various	Good	Good	Linear group of 2 cypres, 2 cherry and 1 lime

¹ Lockhart Garrett (2015) Richmond upon Thames College Arboricultural Report

The condition of many of the trees to be removed is identified as fair or poor and several are identified as 'damaged' and 'easily replaceable'. The trees do not provide a boundary screening function. The loss of this small number of ornamental trees is not considered to be significant.

Root protection areas for trees outside but immediately adjacent to the Phase 1b site will be demarcated and protected and the effects are anticipated to be negligible.

Bats

A bat survey was previously undertaken on the site in 2014. The Baseline Ecology Assessment report that includes the results of this bat survey is provided in **Attachment 8**. The findings of relevance to the Phase 1b demolition site are summarised below:

- A static bat detector was located within the Phase 1b demolition site. Transect routes were located within close proximity of the site. All college buildings on the RuTC site were subject to bat roost emergence surveys.
- A gap between two buildings located within the Phase 1b site (the Science and A blocks) was identified and there was no associated evidence of bats. Buildings with external features of theoretical value to roosting bats are considered to be of low value to roosting bats.
- No trees within the survey boundary had obvious features of value to roosting bats.
- Bat activity surveys recorded mainly individual soprano and occasional pipistrelle bats as commuting and foraging individual bats. No recordings were identified within the Phase 1b site area.
- The bat roost survey recorded no bats emerging from buildings within the College and negligible bat activity levels. It was concluded that the college does not support roosting bats and that a recording of a common pipistrelle was more likely to have been a bat roosting off site than within a college building.

In summary, the effects of the Phase 1b demolition on bats are anticipated to be negligible.

Birds

A breeding bird survey was previously undertaken on the site in 2014. The results are also provided in **Attachment 8**. In summary, no areas of value to breeding birds were identified within the Phase 1b site area and the effects of the Phase 1b demolition on breeding birds are considered to be negligible.

3.3.5 Townscape and visual amenity

The site for the proposed demolition is of limited size and located within the existing developed part of the RuTC site. The works would not affect any buildings or other aspects of the townscape character that are important to the positive townscape characteristics of this area. Whilst a limited number of trees would be removed these are not prominent elements within the townscape. There is no potential for significant townscape effects to arise.

The visual receptors of the demolition works would principally comprise the residents of properties on Edgerton Road to the east. These effects on their visual amenity would involve removal of a limited trees within the site, views of demolition activity and machinery beyond site hoardings. Whilst these receptors are susceptible to visual change the value of the existing view is limited. In addition, the demolition work would only be evident for a temporary period and this period would be limited by the phasing of the demolition with the closest buildings providing screening of demolition activities associated with buildings further to the west. It is therefore considered that there is no potential for significant effect on the visual amenities of residents to arise.

There would be very limited effects on views from the wider area due to the screening provided by existing buildings and trees. Those effects would be negligible.

3.3.6 Ground conditions

A contaminated land assessment was undertaken for the proposed REEC development and included in the ES that accompanied the planning application for the redevelopment proposals. A number of trial pits and boreholes were excavated in 2008 and the results of chemical testing of soil and groundwater samples from these were re-interpreted in 2015 in the context of current Soil Guideline Values and published Generic Assessment Criteria (**Attachment 9** provides the plan identifying these boreholes).

Criteria for commercial redevelopment of the site were exceeded by only one contaminant (benzo[a]pyrene) in one location, indicating that for the most part the soil contamination would not render the site unsuitable for its current use.

The proposed demolition works would involve removal of existing structures, including floor slabs, with no excavation below the existing floor slabs. There will be no necessity for excavation of soil outside existing building footprints. Haulage of demolition material arisings will mostly be via existing site roads and hardstandings, so that disturbance of surface soil by vehicle movements will be minimal.

Since the demolition works will involve no excavation, the current soil and groundwater regime will remain undisturbed and the risks of groundwater pollution by soil contaminants will be unchanged compared to those described in the ES.

The ES found that there was a low risk of hazards from ground gases on the site (methane and carbon dioxide). However, these gases are hazardous only if trapped within closely confined spaces or in deep excavations from which their dispersion into the atmosphere is impeded. Since demolition will not involve such deep excavations and any confined spaces will be demolished as the works proceed, the potential effects of ground gases are minimal.

Contamination by benzo[a]pyrene generally poses a risk through direct skin contact. Although there should be no significant exposure of workers to contaminated material in situ, should it be likely that small quantities of soil be disturbed in areas identified in the ES to pose a contamination risk, site workers will wear personal protective equipment (PPE) to prevent such skin contact.

While there are levels of contaminants above the criteria for residential development in a number of locations within the residential component of the proposed redevelopment, these do not pose a risk in the context of demolition. Contaminated material in these areas will be removed at a later stage as part of the redevelopment itself.

Provided that the appropriate precautions are taken as described above, the potential environmental effects of contaminated soil and groundwater during mitigation are considered to be negligible and a quantitative risk assessment is not required.

A preliminary response from LBRuT contamination expert indicates broad agreement with the above².

3.3.7 Waste

Most of the material arising from demolition of buildings and other above-ground structures can be reused or recycled. Re-use and recycling rates for construction, excavation and demolition (CE&D) waste in London are already high with an estimated rate of 82% in 2008. The Mayor supports further improvement and has set a policy target of 95 per cent for recycling/reuse of CE&D waste by 2020.

² Email from Cathy Molloy (LBRuT) to Mark Buxton (CGMS) 15th October 2015

Total arisings of 742,000 tonnes per annum of construction, demolition and excavation waste are produced in West London. Of this, 411,000 tonnes are exported outside the area, but 776,000 tonnes per annum are imported from other areas so that a total of 1,107,000 tonnes per annum is managed within the area. West London is therefore more than self-sufficient in managing wastes of this type from within its area.

The ES for the REEC development states that approximately 32,600 m³ of demolition material derived from existing buildings, excluding hardstandings and foundations, would require storage or removal from the site following demolition. However, this figure covers the whole site, not just the Phase 1b demolition. No detailed breakdowns of arisings for the Phase 1b works are available, but the volumes of demolition material arisings are likely to be very approximately 8,000 m³ for this element only, based on the proportion of total building footprints it represents.

The following major types of materials are likely to arise from demolition;

- Concrete (superstructures, walls and columns, floor slabs);
- Brick (external and internal walls);
- Glass and cladding (cladding);
- Metal components (windows, plant, superstructures, sub-assemblies);
- Timber and plasterboard (partitions and ceilings); and
- Asbestos.

Of the total demolition waste arisings most of the brick and concrete (including brick and concrete from external walls and internal partitions) would be recycled, crushed, graded and stored on site for reuse.

The total quantity of demolition waste to be taken off site for reuse, recycling or disposal will therefore be much less than the estimated 8,000 m³, although a precise figure is not available. Assuming that half of the material is retained on site and that the remainder has a bulk density of 2, this would equate to less than 1% of the annual total of 1.1 million tonnes of construction, demolition and excavation waste arisings managed in the West London area and is therefore considered to have a negligible effect on the waste management infrastructure.

Although estimates of the volumes of demolition waste leaving the site are not available, the demolition contractor estimates an average of 7 vehicle movements a day associated with this activity. Assuming a maximum capacity of 12 – 14 tonnes per vehicle this equates to between 5,900 and 6,900 tonnes in total, which is broadly consistent with the estimates above.

All waste and material arisings from the demolition works will be managed in accordance best practise measures as set out in the Demolition Method Statement (see **Attachment 2**).

4 Summary

RuTC is proposing the demolition of the Music, Science, Z, LBC and A blocks at the RuTC site in Twickenham. The purpose of the proposed demolition, to which this letter relates, is to enable Phase 1b demolition as early works as part of the REEC development. An outline planning application for the REEC development was lodged in July 2015.

The area of demolition works falls below the 1.0ha threshold within Schedule 2.10(b) (urban development projects) of the EIA Regulations as the area of demolition works is approximately 0.65ha. The site is not within a 'Sensitive Area' as defined by the EIA Regulations.

The works comprise standard demolition works. Any environmental effects associated with the demolition works will be temporary.

On the basis of the information set out above, we consider that the works will not be likely to have significant effects on the environment and as a result, that the works do not constitute EIA

development. We request that the LBRuT take into account the contents of this letter when determining the screening opinion.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'V. Kull'.

Senior Environmental Scientist

Attachments:

- Attachment 1: Demolition Plan
- Attachment 2: Demolition Method Statement
- Attachment 3: Preliminary Noise assessment for Phase 1b
- Attachment 4: Preliminary Air Quality assessment for Phase 1b
- Attachment 5: Preliminary Transport assessment for Phase 1b
- Attachment 6: Phase Habitat 1 plan
- Attachment 7: Tree Plans
- Attachment 8: Baseline Ecological Assessment
- Attachment 9: Borehole locations