

**UNIVERSITY OF CAMBRIDGE
BUILDINGS AND ENVIRONMENT COMMITTEE**

The 4th meeting of the Computer Laboratory Buildings and Environment Committee will be held on Wednesday 18 October 2017 at 10:00am in Room GC22.

Committee Members: Dr Pieter Brooks
Mr Ian Burton-Palmer
Miss Claire Chapman (Secretary)
Mr Brian Jones
Professor Ian Leslie (Chair)
Mr Martin McDonnell
Mrs Caroline Stewart
Dr Graham Titmus

AGENDA

1. Apologies for Absence

None.

2. Minutes of the Previous Meeting

The minutes of the meeting held on 1 August 2017 are attached **(2017-10-02)**

3. Matters Arising

Matters arising from the previous minutes are included in Agenda items below.

4. Reducing Energy Consumption

- i. Update on reducing energy consumption of the corridor lights
 - sourcing a pick and place machine (BDJ)
- ii. Report of unused equipment in SE18
 - Update on AWM equipment removal date (GT)

5. Passive Cooling

- i. Two quotes for crane hire (IBP)
- ii. Meeting with Tim Jones (Electrician) regarding replacing just 4 vents in the Atrium (MJM, PB and IML)
- iii. Merger of SW00 with SN01 alcove
 - Estimation of costs (IBP)
 - Written confirmation of fire risk approval (MJM)
 - Confirmation from EM that the work can be done under the delegated powers from RMC (CS)
 - HoD approval of CL funds (CS)

6. Building Matters

- i. Monitoring of the new 200A 'new UPS DB in Server Room GN13' B02L feed to the UPS
 - To ascertain which meter needs to be replaced (IML)
- ii. Quote from BBC Fire regarding putting all 9 stair case doors on the East side of the building on automatic door hold back
 - HoD approval to use Lab funds (CS)
- iii. Mains sockets in Lecture Theatres and video signals in Lecture Theatres
 - Additional eight sockets to be fitted (Remit from Building Services)
 - Point-to-point links under the floor to hop underneath gangway (BDJ)

- iv. Quotes to adapt the nine high windows (to include cost for motorised openers) on the east corridor of each floor to help with passive cooling (IBP)
- v. List of minor works which committee members feel require attention (all committee members)
- vi. Cancel 'cloud management' of LEDs (IBP)
- vii. Removal of Maglock in SW00 to change door hinge to open inwards rather than outwards (IBP)
- viii. Increase the lighting in SW02 – proposals from Alan Blackwell (**2017-10-06iv**) (IML)
 - List of approved suppliers from Andrew Kerley and quotes (IBP)
- ix. Increase the lighting on the first floor student hangout area (CS)
- x. Refurbishment of kitchenettes FC35 and GS13
 - Quotes for work (IBP)
 - Will refurb be covered by the RMC agreement for minor works? (CS)
- xi. Outside bike shelter
 - Quote for sectioning off part of the bike shelter (IBP)
 - Update on bike theft (IBP)
- xii. New tables in Intel Lab
 - Sturdier tables needed (GT)
- xiii. GN09 corridor soundproofing (IBP)
- xiv. Roof Membrane
 - Proposal to fit solar panels in the upper side of roof membrane whilst EM replace roof membrane (IBP)
- xv. Committee to agree a list of energy reduction proposals for the Facilities Manager to submit to Estate Management

7. AV Matters

- i. Lecture theatre lights
 - Creston software update (BDJ)
- ii. Temperature control fan on back wall of LT1
 - Proposed installation date from Andrew Kerley (IBP & MJM)
- iii. Acoustics improvement in the Atrium
 - EDSAC printed wall hanging trial costs (GT)

8. Committee Budget

Expenditure Report (2018-10-08) (CS & IML)

9. Any Other Business

10. Date of next meeting

The next meeting of the Committee will be arranged for January by Doodle Poll.

**UNIVERSITY OF CAMBRIDGE
BUILDINGS AND ENVIRONMENT COMMITTEE**

Minutes of the 3rd meeting of the Computer Laboratory Buildings and Environment Committee held on Tuesday 1 August 2017 at 11:00 in Room FW11.

Present: Dr Pieter Brooks
Mr Ian Burton-Palmer
Miss Claire Chapman (Secretary)
Mr Brian Jones
Professor Ian Leslie (Chairman)
Mrs Caroline Stewart

1. Apologies for Absence

Mr Martin McDonnell
Dr Graham Titmus

2. Minutes of the Previous Meeting

The minutes of the meeting held on 30 May 2017 were approved.

3. Matters Arising

None.

4. Reducing Energy Consumption

i. Update on reducing energy consumption of the corridor lights (MJM, IBP & BDJ)

Progress is slow but BDJ is sourcing a pick and place machine to produce circuit boards.

Action: BDJ

ii. Reinstalling alcove light switch test (MJM)

All alcove lights have been changed to light switches rather than sensors and no concerns have been raised.

iii. Report of unused equipment in SE18 (GT)

A start has been made on planning the migration of kit from SE18. Discussions with AWM are ongoing. It was agreed that AWM should be given a firm deadline by GT to move his equipment.

Addendum: Note - AWM is on sabbatical leave from Lent 2018 - Michaelmas 2018

Action: GT

5. Passive Cooling

i. Two further quotes for crane hire (IBP)

IBP agreed to obtain two crane hire quotes. He will do this at the end of September/early October 2017 as quotes are only valid for 3 months and the work is not planned until December.

Action: IBP

ii. Meeting with Jim Gorman, Fire Officer regarding replacing just 4 vents in the Atrium (MJM, PB and IML)

As Jim Gorman is retiring, Tim Jones (Electrician) will be undertaking his duties and a meeting will be arranged with him in due course.

Action: MJM, PB and IML

iii. Merger of SW00 with SN01 alcove - anticipated renovation date (IBP & MJM)

It was agreed we should go ahead with merging SW00 and the SN01 alcove into one

room. IBP agreed to obtain an estimation of costs. It was agreed IBP would ask MJM if he could obtain written confirmation of the fire risk approval prior to starting on this. We need to check with EM that this can be done under the delegated powers from RMC. When estimates are obtained, the HoD will need to approve the use of CL funds.

Action: IBP, MJM and CS

6. Building Matters

i. Monitoring of the new 200A 'new UPS DB in Server Room GN13' B02L feed to the UPS. Electrician visit from EM (IBP)

A meter needs to be replaced, but initially we need to ascertain which meter it is before EM is contacted.

Action: IML

ii. Quote from BBC Fire regarding putting all 9 stair case doors on the East side of the building on automatic door hold back (2017-08-06ii) (MJM)

It was agreed the quote from BBC Fire is acceptable. CS agreed to ask the HoD for approval to use Lab funds for the work.

Action: CS

iii. Mains sockets and video signals in Lecture Theatres (MJM)

Event organisers using the Lecture Theatres have reported there are too few electric sockets available. This results in trailing leads which are in breach of health and safety regulations. It was agreed an additional eight sockets are needed and Building Services will produce a remit.

There is also a problem with trailing video leads across the gangway. BDJ will lay some point to point links under the floor to hop underneath the gangway to avoid trailing wires.

Action: BDJ and MJM

iv. Report on Resource Management Committee's (RMC) agreement on procedure for minor works (IML)

IML reported he met with Colin High, Senior Surveyor at EM and referred to paragraphs 10 and 11 in the document. It has now been agreed by the RMC that minor building works connected to our energy consumption can go straight to EM rather than going through the Minor Works Process.

It was agreed that we should obtain a quote to adapt the nine high windows on the east corridor of each floor to opening windows to help with passive cooling. IBP will obtain quotes. He will also get quotes for what it would cost to convert them to motorized openers.

A list of all the minor works committee members feel require attention should be submitted to PB and IML.

Action: IBP and all committee members

Report on meeting with Colin High from Estate Management (IML)

See item iv. above.

v. Cancel 'cloud management' of LEDs (IML)

It has been agreed to cancel the cloud management of the LEDs.

Action: IBP

vi. Two quotes to change opening for SW00 doors (IBP)

IBP reported that Briars have quoted £85.00 to remove the Maglock and to replace the hinge to open outwards rather than inwards.. The Committee wanted to check that the

change would now mean that the door would hinge inwards and outwards but if so, then it was agreed we should go ahead. IBP reported that Briars also need to carry out two additional jobs at the same time.

Action: IBP

vii. Increase lighting in SW02 (IML & BDJ)

All fluorescent tubes have been replaced but with no impact. Further investigations on how to improve the lighting will be carried out.

Action: IML and BDJ

Prof Alan Blackwell has asked for natural ventilation to be put in place in SW02. It was agreed we should obtain quotes to change the current non-opening windows in SW02 and FW11 to opening windows. IBP will contact Andrew Kerley for approved suppliers and obtain quotes.

Action: IBP

viii. Refurbishment of common room kitchen and kitchenettes (x9) (Committee Members)

It was agreed that we should initially refit FC35 and GS13 kitchens as these two are in the most of refurbishment.

If possible the refits should be the same as the SS17 kitchen which Intel had fitted 16 years ago as this is still in excellent condition. IBP will obtain quotes.

CS will ask Nick Tamkin if the kitchen refurbishments are covered by the RMC agreement for Minor Works.

Action: IBP and CS

ix. Security of outside bike shelter

It was agreed to go ahead with the proposal to section off part of the bike shelter so that part of it can be locked to provide more secure storage. It was felt that it would be best if we could use the same card control as the building access system. IBP will obtain quotes.

Action: IBP

7. AV Matters

i. Lecture theatre lights – Creston software update (BDJ)

No update has been made so far.

Action: BDJ

ii. Temperature control fan on back wall of LT1. Proposed installation date (IBP and MJM)

No update has been made so far and Andrew Kerley will be approached.

Action: IML

iii. Acoustics improvement in the Atrium – wall hanging trial (GT)

Wall hangings can be printed from photos of EDSAC or similar. We are awaiting costs for these. The area in front of the lecture theatres will be trialed first as this is the most cost effective to improve.

Current plan is to try to make incremental changes until we are content with the result. The current position of the stage for the social tea should be changed as it is the worst from an acoustics point of view.

Action: GT

8. Energy and Environmental Website

All changes have been made.

9. Committee Budget

It was requested it would be helpful if the Committee could hold a budget for the works that are needed and that an expenditure report be made available for each meeting. IML and CS will discuss this with HoD.

Action: IML and CS

10. Any Other Business

i) New tables in Intel Lab

The six new tables on trial in the Intel Lab was discussed. It was agreed they do not seem quite sturdy enough. CS/PB will report back to GT.

Action: PB/CS/GT

ii) GN09 Soundproofing

It was agreed it would be beneficial to soundproof the GN09 door in view of future needs for the corridor. It was suggested we might do this at the same time as the Atrium soundproofing.

Addendum: GT advised there is no need for the work to be done simultaneously as they each have different requirements and will be two different suppliers.

iii) Roof Membrane

EM have advised that they will be replacing the upper side of the roof membrane next year. IBP suggested fitting solar panels in the membrane at the same time. It was agreed to add this as an item for discussion to the next meeting's agenda.

Action: IBP

11. Date of next meeting

The next meeting of the Committee will be arranged for October 2017 by Doodle Poll.

We have received requests over several years from MPhil students asking for improved lighting in their working space in SW02. Some ask specifically for natural lighting, some for improved aesthetics, and others just for more light. I have given some thought to this, and discussed with Caroline and with Ian B-P, and have a number of suggestions for possible improvement.

1. Add glass windows in the wall between SW02 and the Street/atrium. These could be above eye-level to retain privacy, if desired.
2. I expect that adding windows in the external wall would be too costly and architecturally undesirable. Nevertheless, I think the committee should briefly consider this option.
3. Add glass windows at the top of the wall between SW02 and SW01. This would provide less natural light, and fewer aesthetic benefits for those working in SW02, but would probably involve minimal cost and disruption.
4. If natural lighting is infeasible, then increased artificial lighting could be considered. This would consume more energy, and might be less aesthetically desirable. Aesthetics could perhaps be improved by use of uplighters, local task lighting, or architectural spotlighting. Energy costs can presumably be minimised through use of LED technologies as being researched by Ian Leslie.

Additional artificial lighting would be of value, whichever of the above options is chosen, to provide task illumination in the winter months.

Thanks,

Alan

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Alan Blackwell

Professor of Interdisciplinary Design, University of Cambridge

<http://www.cl.cam.ac.uk/~afb21/>