Version 1.0 – 26 January 2017

Classification: Open	**Date:** 26 January 2017	**Report for information to:** Licensing Sub Committee
Report title:	**Acoustic report on sound limiters, sound barrier, and other public nuisance noise issues at Chronic Love Foundation Arts Café, the Bussey Building, Copeland Park, 133 Copeland Road, Peckham**	
Ward(s) or groups affected:	The Lane	
From:	Paul Newman, Principal Environmental Health Officer	

BACKGROUND INFORMATION

1) This report is produced to fulfil directions in:

Notice of Adjournment, Licensing Committee – 13 December 2016, Licensing Act 2003: The CLF Art Café, Unit A1, A2 and A3, AG1, Basement A, The Bussey Building, Copeland Park, 133 Copeland Road, London SE15 3SN;

1.1 The premises is to be inspected by Southwark's Environmental Protection Team ("EPT")

1.2 An acoustic report is prepared addressing:

a. Whether sound limiters have been fitted in the premises;
b. Whether any sound limiters fitted in the premises are working;
c. Whether sound limiters fitted in the premises are set at an appropriate level;
d. Whether there has been a change to the equipment involved in the broadcast or limiting of sound from licensed entertainment;
e. If there has been a change to the equipment involved in the broadcast or limiting of sound from licensed entertainment, whether the sound limiters have been re-set and to what level;
f. The viability of the external acoustic barrier
g. Make any additional recommendations to noise insulation.

1.3 The Notice of Adjournment includes requirements as to exchange of information by way of service of copies between the Environmental Health Responsible Authority, and representatives for the Premises Licence Holder.

2) The premises have planning consent to be used for mixed use of a bar, theatre, exhibition space, sandwich bar and TV/web production suite from ground to third floor.

3) The de facto use of the premises is predominantly for night club activities. The basement is set up as a club lounge with loose comfortable seating rather than predominantly for dancing, and there is also a record shop counter. The ground floor, while licensed, is not presently used, except for storage. The main dance floor is on the first floor, and the second floor has been divided into two smaller dance floors. There is also a third floor area with fixed raked seating that is used as a 'chill out' area during night club activities, that also has a sound system, and an area of floor between the seating and the sound system that is suitable for use as a smaller dance floor.

    a) Night club activities require a high internal sound level for commercial success, and the engineer will usually wish to have the maximum sound level that is consistent with protection of the loudspeakers. This level is thought, based on the report issued by Vanguardia, to be around 103 dB(A) internally on the third floor, and is likely to be similar on the other floors.
    b) In addition to music noise, there is crowd noise during access and egress through the alleyway and courtyard, and from the de facto use of the courtyard and alleyway for smoking, meeting and chill out area.

4) There are residential properties in Thalia Court nearby. Figure 2 shows the noise sensitive facades, and the second floor location of the balcony at the applicant for Review's flat. It is approximately 30 metres from the façade of the Bussey building, to the façade of the nearest residential premises.

5) Where there is nearby conflicting residential use, it is relevant to consider whether there are openable windows or doors on the noise sensitive facades, and whether it is reasonable to expect that residents will be able to keep windows and external doors closed, and for that purpose to consider the thermal insulation and comfort cooling of the residential property.

6) The layout and capacity of the premises

    a) The courtyard is shown marked blue in figure 3. Further impression of the space can also be gained from photographs 32, 33 and 35 (Appendix 4).
    b) The floor plans of the licensed area are shown in Appendix 6.
    c) The licensed capacity of each area (condition 307) is:
        i) Basement: 100
        ii) Ground floor 350
        iii) First Floor: 300
        iv) Second Floor: 300

v) Third Floor: no limit specified in condition 307, but subject to an overall limit of 1050 across the whole of the licensed premises.

7) Two acoustic reports have been produced by Vanguardia for the Premises Licence Holder, and these are reproduced at Appendices 1 and 2.

INVESTIGATION AND TESTING

8) Inspections and testing undertaken.

a) EPT undertook a subjective assessment of crowd noise and entertainment noise from CLF Art Cafe at the applicant for review's residential premises, on early hours of Saturday morning the 17th December 2016 at 00.30 to 01.10.

b) In order to answer question c on the Notice of Adjournment, EPT believe 6 tests will be needed to measure sound levels inside the premises and make a simultaneous subjective assessment outside the premises, either at the applicant for Review's flat, or at the monitoring point in the courtyard to Thalia Court used by Vanguardia. The first 5 tests should take place with each of the 5 systems being operated individually, and with all the systems operated together for the 6th test.

c) EPT have identified crowd noise from the courtyard and alleyway that includes the tented outdoor seating and gathering area, as a problem that causes disturbance to the applicant for Review in her residential flat.

d) EPT findings of the 17th December visit are set out at Appendix 3

e) An inspection of the premises layout by an EPT Officer accompanied by a Licensing Officer took place to determine the number, location and type of sound limiting equipment on 4th January 2017, and these are liusted at 12 a (i) below. Officers inspected the sound limiting equipment in Basement, First, Second and Third Floors. Licensed areas on the Ground Floor were not inspected, and the Premises Licence Holder confirmed this area is not used for licensable activities.

f) EPT Officers have not found detailed records of the type of sound limiters and entertainment systems in use in the past, and have not been able to answer question 1 d on the Notice of Adjournment, whether there has been any change in the sound systems or sound limiters.

g) Officers took photographs of the premises, and these are reproduced numbered 1 – 35 together with a photograph produced in evidence by the applicant for Review, a satellite photograph, and map plans, in Appendix 4.

i) Commentary on photographs;

(1, 2) View from stairwell window looking north across railway track towards Peckham Levels.
(5) Third floor theatre right speaker stack and sound limiter and amplifier rig.
(6) Third floor theatre showing performance area and speakers and rig containing amplifiers and two sound limiters wired in series, and cooling fan
(7) Third floor theatre seating and red painted structural columns to ceiling height approx. 3 metres.
(8) Second floor looking into west dance area.
(9) Second floor east dance area showing DJ booth.
(11) Sound limiter and amplifiers to second floor east dance area. Note this type of sound limiter attenuates as well as trims.
(12) taken inside partitioned area between 2nd floor east and west dance areas. Sound limiter and amplifiers to second floor west dance area.
(14) Second floor west dance area looking towards bar and showing apparently identically constructed insulation panels in window recesses, and cooling fans.
(15) Second floor west dance floor area showing high range speakers (suspended), mid range speakers (mounted) and low range speakers (on floor). White painted structural columns approx. 3 m ceiling height.
(16) First floor bar area.
(17) View of first floor with ceiling height 3 m approx., and repeating insulating infill panels in window recess above radiators. Corner of bar to right, stage and DJ booth to left. Pale yellow painted structural columns.
(18) Narrow angle view of left speaker stack
(19) First floor showing right speaker stack, and high level ventilation duct, and recently installed insulation infill over windows in recess above thermal radiator.
(20) View from 1st floor dance floor onto stage with DJ booth and left speaker stack.
(21) Same as CLF 022, but also showing view across stage into first floor bar area.
(22) First floor rear of stage, rig in cage containing 3 sound limiter units (1 said to be in use, 2 said to be redundant) and amplifiers.
(23) showing interior of Basement A with loose furniture removed for floor cleaning, bar, 2.3 M height approx. pale yellow painted structural column.
(24) Inside Basement A view of Rye Wax record shop counter.
(25) Internal shot of Basement A, showing type of tables and benches identical to the ones under the gazebo, comfort cooling/ heating, stairs to ground floor and ceiling height approx. 2.5 metres.
(27) close up shot of Basement A Soundweb limiter and amplifier stack.
(29) Soundweb noise limiter and amplifiers in Basement A.
(32) shows the courtyard with grotesque murals, with 4 story chamfered rear extension to 136 Rye Lane to the right, and forming part of the southern boundary wall to the courtyard. To the left, the western end of the Bussey Building. Central, the gazebo roof and the noise barrier.
(33).This shows the benches in Bussey Alley outside the triple glazed windows to Basement A.

(35) This shows the distance from the alleyway surface to the base of the acoustic barrier is approx. 4.7 metres. There is a table and benches provided under a gazebo structure, and a nearby low wall, which could also be used as informal seating. The gazebo also appears on the satellite photograph.

h) Following consideration of the layout and sound insulation works above, EPT officers suggested to the Premises Licence Holder's representatives by email on 16 January 2017 (copy in Appendix 5), a further exercise to set the sound limiters at an acceptable level, and requesting a weekday late evening appointment for this purpose. Technical information was also sought relating to the reverberation time of the entertainment spaces.

i) The email of 16th January 2017 included a further copy of an email sent on Wednesday 11th January 2017 requesting a reply to a technical question to the Premises Licence Holder's sound engineer, relating to the ability of the sound limiters to adjust in real time in response to changes in the reverberation time of the entertainment spaces. It also included a copy of an email sent to the Premises Licence Holders representative informing them of the number and size on disk of the photographs, and requesting direction on the most convenient way for them to receive this material. Correspondence requesting this information is set out in Appendix 5.

j) As of the time of writing, no reply was received from the Premises Licence Holder or their representative. In the absence of the Premises Licence Holders cooperation in this matter to arrange an appointment, or to provide the requested technical information, it has not been possible to answer, within the required time constraints for producing this report and serving a copy on the representatives for the Premises Licence Holder by 4 pm on Friday 27th January at 4 pm, the question c posed by the sub committee adjournment notice: whether the sound limiters fitted in the premises are set at an appropriate level.

k) On 17 January 2017, EPT officers had contact by email with the applicant for Review. The applicant cast doubt on whether the sound insulation works had been sufficient to permit operation with the sound limiters set at their current levels, as she said the weekend of 14-15 January 2017 had been a problem, and that the bass had been heard loudly.

9) Noise sources: music noise

a) Equipment used for the broadcast of entertainment sound is required to be isolated from the floor (see feet underneath 3rd floor speaker stack in photo 5).
b) The maximum capacity of the music equipment is said in the Vanguardia reports to be 103 dB: if the equipment were played at 106 dB for any length of time, this would result in damage to the equipment.

10) Noise source: crowd noise

a) Crowd noise is highly variable, and depends on the numbers of people present, their state of excitement, and levels of intoxication. The information content in the noise also attracts additional attention, and may therefore be more disturbing than might be expected from considering the equivalent sound level.

11) Noise propagation

a) The noise propagation characteristics of the third floor sound system have been determined by relying on and assuming as accurate, data contained in the Vanguardia reports (attached as appendices 1 and 2).

b) The data included in the reports permit calculations that indicate there is currently a reduction in entertainment music noise of 41 dB(A) inside to outside across the building envelope.

12) Noise reduction, attenuation, and mitigation.

a) Sound limiters
   i. The sound limiters in use at the time of the inspection were;
      (a) Basement: Soundweb BSS
      (b) First floor: Lake Contour and 2 redundant units; Soundweb BSS and SIDD Xtra
      (c) Second floor west: BSS Omnidrive
      (d) Second floor east: AVC2.
      (e) Third floor: Soundweb BSS and AVC2 wired in series.
   ii. The sound limiter on the third floor theatre was hired, and not owned by the venue. The permanence of the system is therefore open to question, as it could be sent back to the owners and replaced at any time.
   iii. The sound limiters work by splitting the signal in three broad frequency bands (low, mid, and treble), and 'trimming' the signal between the amplifiers and the speakers. Where the signal in one band is causing the exceedance, the trimmed signal is equalized, so that the sound is reproduced across the frequency range, but at an overall lower volume. The intended effect is that the system cannot go louder than when it was set.
   iv. The AVC2 additionally attenuates the volume slightly as it approaches the maximum, the effect is that the level will be slightly quieter than when it was set, and will creep up to the maximum over a set period.
   v. The sound levels can only be set by persons with an access code or password, and with the appropriate software installed on a portable computer, or an access key. The sound engineer present said that he is the only person with the access codes and

keys, and he would not entrust them to any other person due to the risk of damage to the sound systems.

b) Sound absorbance due to occupancy
   i. The occupancy levels of the entertainment areas will have an effect on the amount of sound absorption due to the presence of people, each person being responsible for approximately half a metric sabine of additional absorbance. In order to calculate the effect of occupancy on the resultant noise level, it would be necessary to know the reverberation time of each entertainment space.
   ii. It is believed that the sound limiters used are not capable of adjusting sound levels to compensate for occupancy, and confirmation has been sought by email on Wednesday 11th January, although despite reminders, no reply has been received.
   iii. Calculations go here for illustration if reverberation time/ estimates are received.

c) Sound insulation
   i. At the time of the site visit on 4th January 2017 the visible part of the sound insulation installed across the window openings at the premises was inspected. On the room side, this consists of ¾ inch marine plywood flush with the adjoining wall pillars as seen in photographs 8, 13-17, and 19. It was apparent that the remaining space to the windows had been filled with a sandwich of a number of different materials.
   ii. At the hearing on 16 December 2016, EPT officers sought from the Premises Licence Holder, and the Premises Licence Holder agreed to provide, construction drawings or adequate description of details of the sound insulation installed at the premises. At the time of the site visit on 4th January 2017, no construction details had been received, and officers again sought these details. The Premises Licence Holder gave a rapid verbal description of the construction, and officers requested confirmation by email, which the Premises Licence Holder agreed to provide. A reminder email was sent to the Premises Licence Holder on 11 January 2017 with a copy to his representative (copy in Appendix 5). At the time of writing, no reply or acknowledgement or written confirmation of the construction details has been provided.

d) Building envelope
   i. The building is metal frame, with a brick façade. In theory, containment in a brick built structure could give a reduction of up to 50 dB(A). The Premises Licence Holder has given consideration to bricking up the windows, and has in fact already bricked up the second floor windows overlooking the courtyard. This is likely to give some additional improvement, but unlikely to be as much as the potential 9 dB(A) suggested by the calculated

current attenuation of 41 dB(A) due to the steel frame construction of the building.

e) Effect of noise barrier
   i. A barrier has been erected on the top edge of the existing first storey on the southern margin of Bussey Alley, between the courtyard and Thalia Court (photos 32, 34 and 35). The photograph supplied by the applicant for Review shows that the barrier permits a direct line of sight between the upper part of the second floor window openings, and the applicant for Review's balcony. The barrier is also partially open at the east end. Reference to photographs and plans also show that the courtyard is surrounded by higher buildings, creating a reverberant space, and crowd noise can be reflected from the upper parts of the buildings. The barrier will provide some attenuation for crowd noise, but due to the character of the noise, and variability of the source volume, and the effect of 4 and 5 storey adjacent walls creating a reverberant space, it is not possible to calculate with any certainty, how much reduction. Any benefit is already accruing to the Premises Licence Holder, and removing the barrier without relocating the crowd will make it worse.
   ii. The barrier at present does not appear to provide any useful reduction of the crowd noise to an acceptable level as it affects the applicant for Review's flat.

KEY ISSUES FOR CONSIDERATION

13) Attempting to set sound limiters that are designed to protect loudspeakers against damage, in a way that also prevents noise nuisance, may not achieve the desired result on the first, or even on one of several subsequent attempts due to the effect of background level masking and internal absorbance.

a) If the limiters are set with the premises empty, then the internal sound level may decline as the premises fills up, due to sound absorbance. In order to calculate the likely effect of introducing 300 people into a space where the signal output of the sound system is limited, on the reduction in internal sound levels, the reverberation time of each space needs to be known (and the cubic volume of each space, which may be calculated from room heights as noted during inspection and scale floor plans). As the premises fills up, the venue management and staff may perceive that the noise limiters have been set at an unnecessarily low level, inconsistent with their business operation.
b) If the limiter levels are set with the premises full, then there may be a perceptible change in the volume of music at different times, depending on how full the venue is. Residents may wrongly suspect that the venue is altering the limit levels over the course of the evening.

14) Control of external crowd noise should be considered consistently with how an application to have a beer garden in this location would be considered, and a time limit should be imposed for use of any external area that causes significant crowd noise.

15) Section 224 of the Licensing Committee's Statement of Licensing Policy states that 22.00 hours is the latest that outdoor areas should be used where there is an impact on residential property.

RECOMMENDATIONS

a) The sound limiters at the CLF Art Café should be set to limit the sound systems at a level where music entertainment noise is not audible at the façade of the nearest exposed residential premises when all five sound systems are operating together, and the premises is empty.
b) Maximum internal sound levels expressed as LAeq (1 minute) should be stated on Annex 3 of the Premises Licence for each licensed area or part with a separate sound system in de facto use for night club activities. (The level may be different for each of the entertainment spaces).
c) A condition should be placed on Annex 3 of the Premises Licence requiring the sound limiters not to be altered in such a way as to increase the maximum internal sound levels.
d) A condition should be placed on the Premises Licence that if a sound limiting system is replaced, the replacement system should be set at or below the maximum internal sound level, measured when the premises is empty.
e) Sound limiters should be either hard wired to the amplification system, or removed. There should be no redundant sound limiting equipment in the amplifier racks.
f) The courtyard area and the alleyway should not be used except for access to and egress from the premises. The gazebo structure and tables and chairs should be removed from these areas, and not be replaced, except for those in Bussey Alley protecting the basement windows against damage, and any replacement structures in Bussey Alley must not be suitable for seating, or for informal seating.
g) Patrons must not be allowed to wait or congregate in the courtyard or Bussey Alley to the south of the Bussey building.
h) A designated smoking area should be created at the eastern end of Bussey Alley near the two disabled parking spaces dedicated for use by CLF Art Cafe, and smoking should not be allowed in the courtyard or alleyway.
i) No drinks, or empty drinking vessels or drinking containers should be allowed out of the building.

APPENDICES

No.	Title
Appendix 1	Vanguardia report dated 26 October 2016
Appendix 2	Vanguardia report dated 24 November 2016
Appendix 3	Insert title of document
Appendix 4	Photos and plans
Appendix 5	Correspondence
Appendix 6	Licence Plans
Appendix 7	Premises Licence Holder response

Lead Officer	Debra Allday on behalf of Director of Legal Services	
Report Author	*Paul Newman*	
Version	*v 1.0*	
Dated	26 January 2017	
Key Decision?	No – this paper provides information to fulfil a direction of a Licensing Sub-Committee.	
CONSULTATION WITH OTHER OFFICERS / DIRECTORATES / CABINET MEMBER		
Officer Title	Comments Sought	
Director of Law and Democracy	No	No
Strategic Director of Finance and Governance	No	No
List other officers here	n/a	n/a
Cabinet Member	No	No
Date report sent to Constitutional Team / Community Council / Scrutiny Team		26 January 2017

Appendix 1: Vanguardia report dated 26th October 2016

Appendix 2: Vanguardia Report Dated 24 November 2016

Appendix 3

EPT findings of visit 17 December 2016 00.30 – 01.10
Subjective assessment of crowd and entertainment music noise from CLF Art Café at residential premises occupied by the applicant for review.

The outdoor air temperature at the time of visit was 10 degrees C.

Before attending the applicant for reviews' premises visual observations were made of the area outside the entrance on Rye Lane. At 23.50 on 16 December, it was observed that there were no patrons queuing behind the crowd barriers on the pavement on Rye Lane. A few dozen young adults were observed arriving in Peckham Rye Overground station at this time, but it appeared their initial destination was the MacDonalds restaurant on Rye Lane, and other nearby premises. At 00.30 the queuing area was full, but not overflowing.

The flat appears to be very well thermally insulated. On arrival inside the flat, the internal air temperature was very warm, despite the balcony door being open. On remarking on the air temperature, the occupants informed the EPT officer that they did not have their heating on, and the heat was because of heat from the downstairs neighbours' flat, and because the building was very well insulated. The officer noted that it was apparent when not wearing shoes that the floor temperature was noticeably warmer than the air temperature.

It appears from the apparent very high standard of thermal insulation that due to their thermal comfort needs, it would be unreasonable to expect the applicant for review to keep the windows and balcony door closed on days when the building has been space heated, of has experienced solar gain.

Two sources of noise were apparent from the CLF Art Café; crowd noise, and entertainment music noise.

With the balcony door open, crowd noise was clearly audible, and disturbing. The crowd noise was similar to what might be expected in a residential premises fronting onto a beer garden during opening hours, with a lively buzz of conversation, and occasional shouting.

Music noise was clearly audible in the applicant's flat, although was not causing vibration, and was not at a level that would be considered a nuisance. The applicant said that the music was noticeably quieter on this evening than it had been previously. The officer suggested that this might be because the Premises Licence Holder had very recently completed sound insulation works to the windows.

With the balcony door closed, the music noise was only faintly and intermittently audible. Shouting from the courtyard was still audible.

After attending the applicant for Review's premises ,a further observation was made of the queuing area at 01.12. No patrons were queuing, and staff from the premises were engaged in removing the crowd barriers.

Appendix 4

Photographs and plans

Figure 1

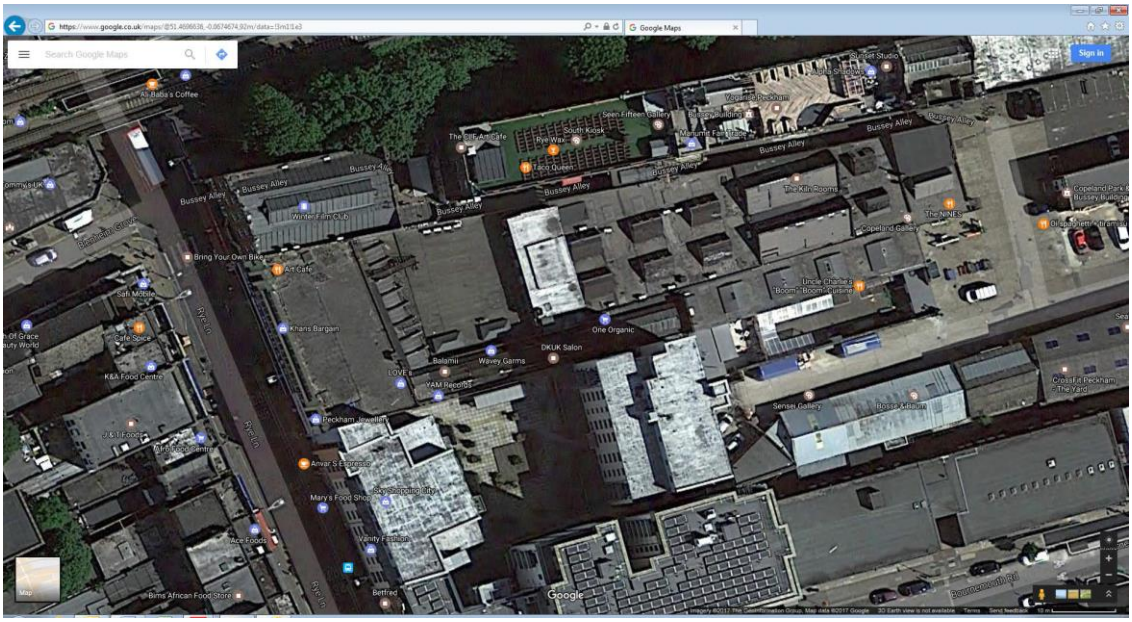

Figure 2 Google Earth satellite photograph Thalia Court and Bussey Building

Figure 3 Map showing courtyard and approximate position of gazebo

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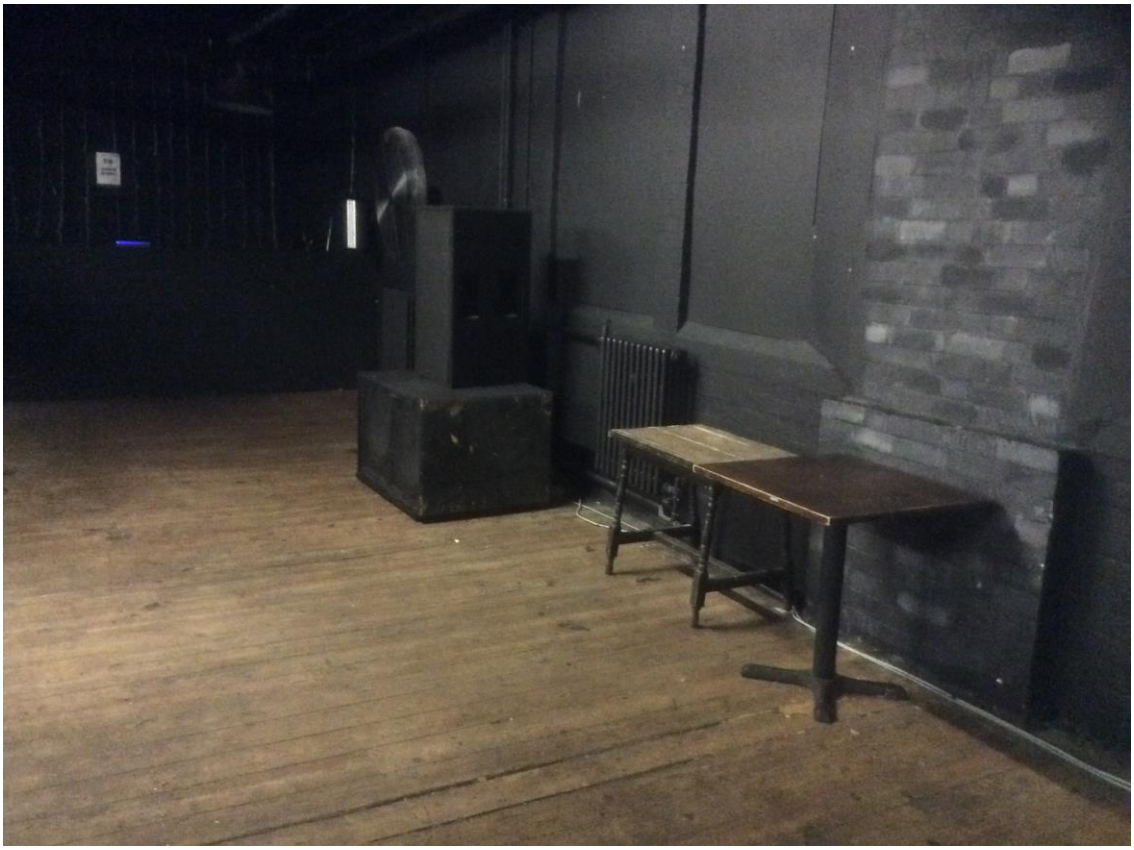

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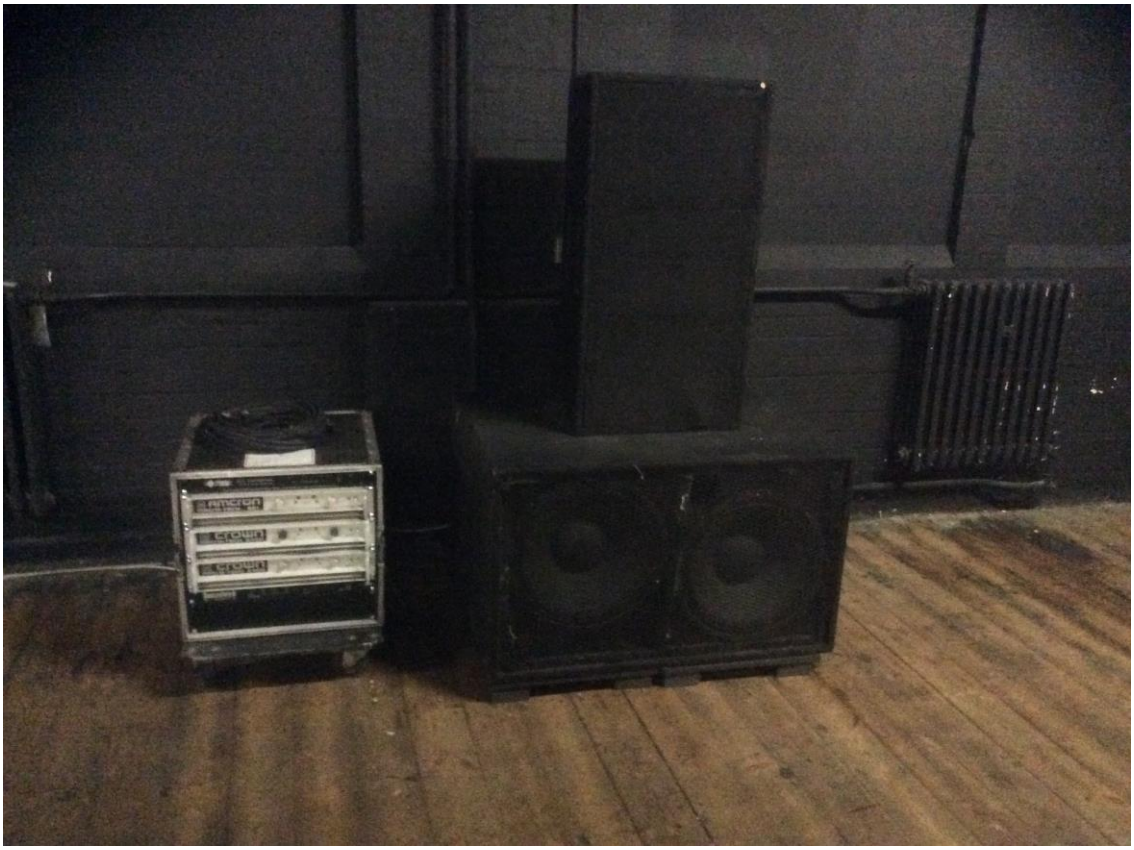

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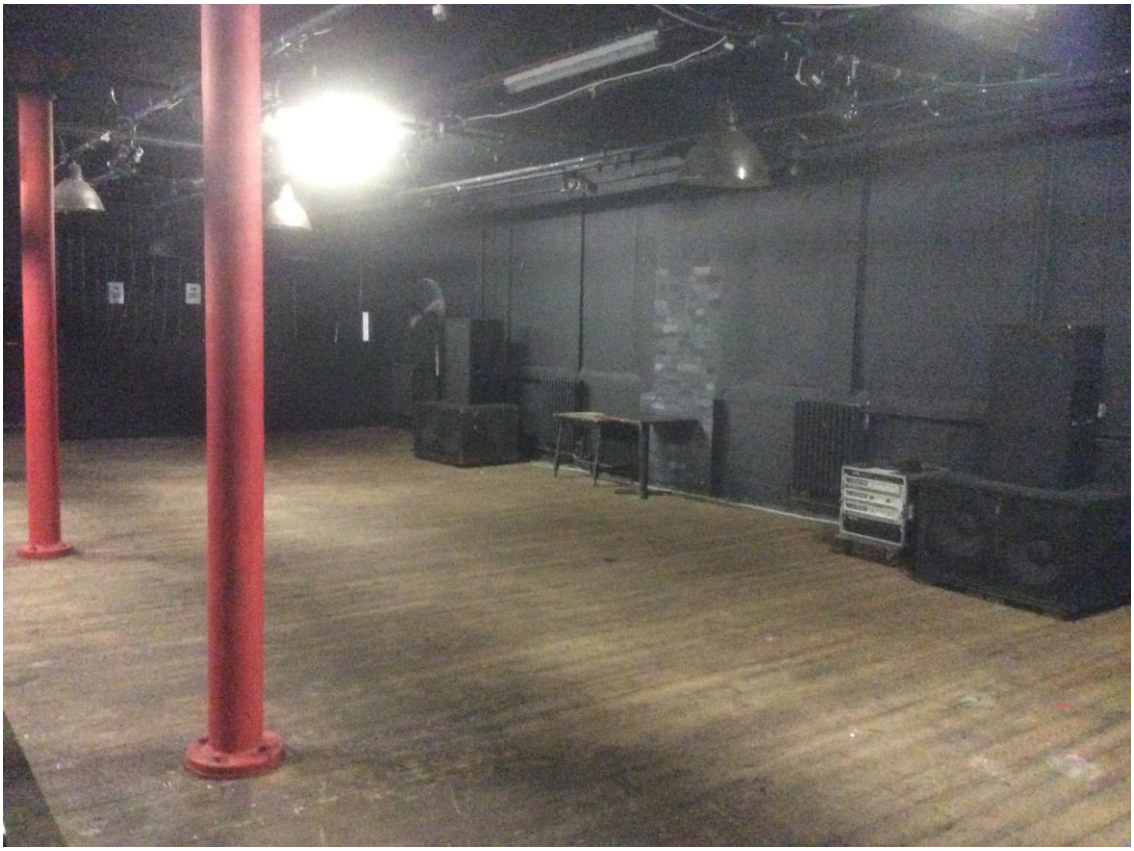

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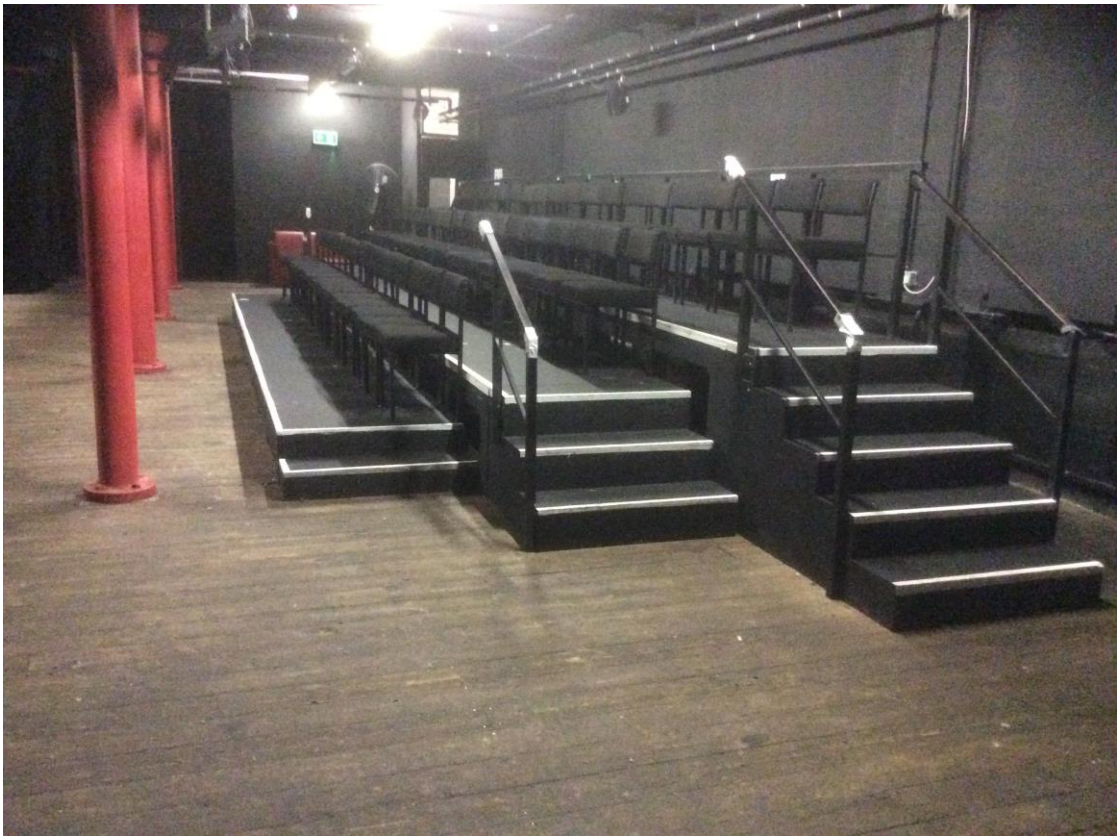

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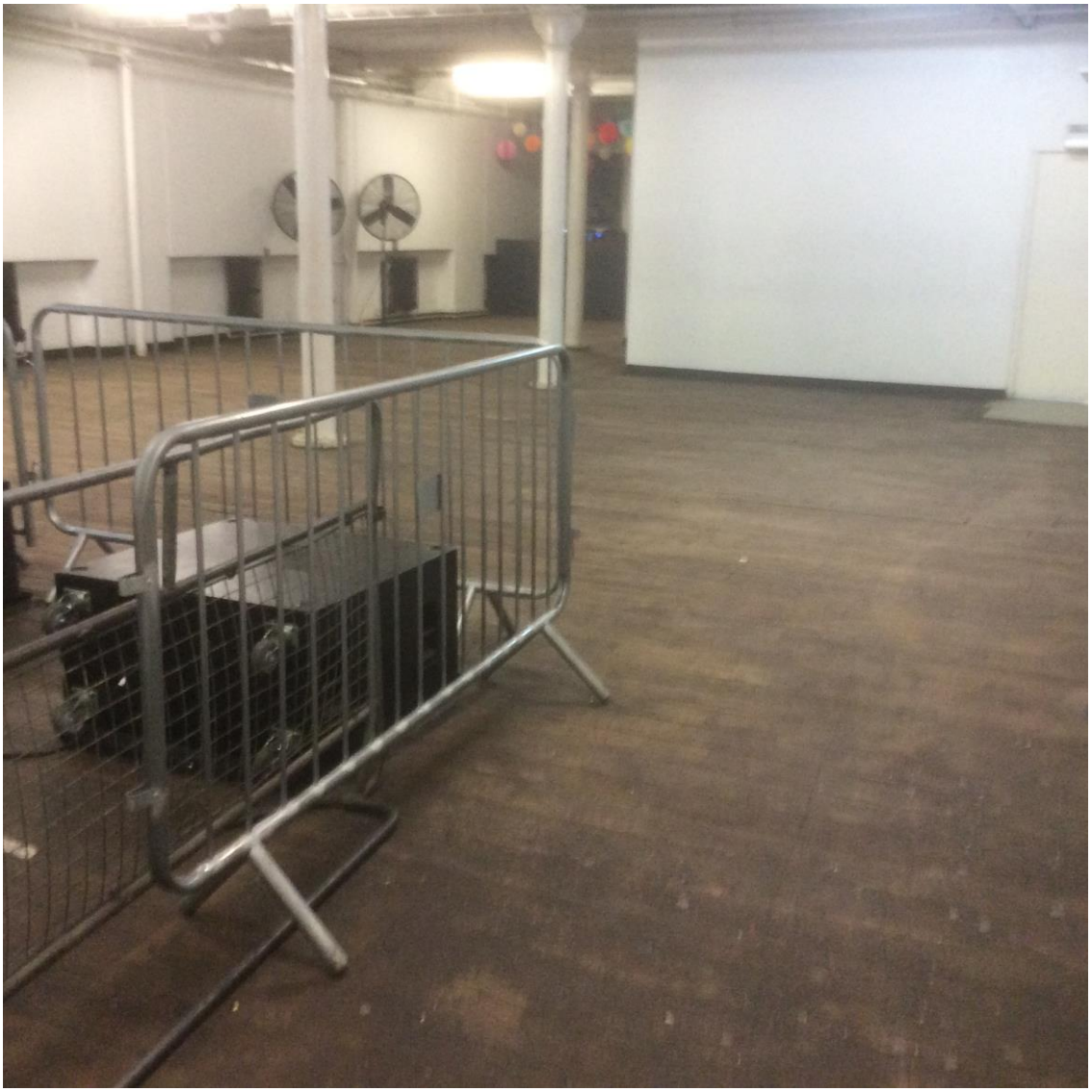

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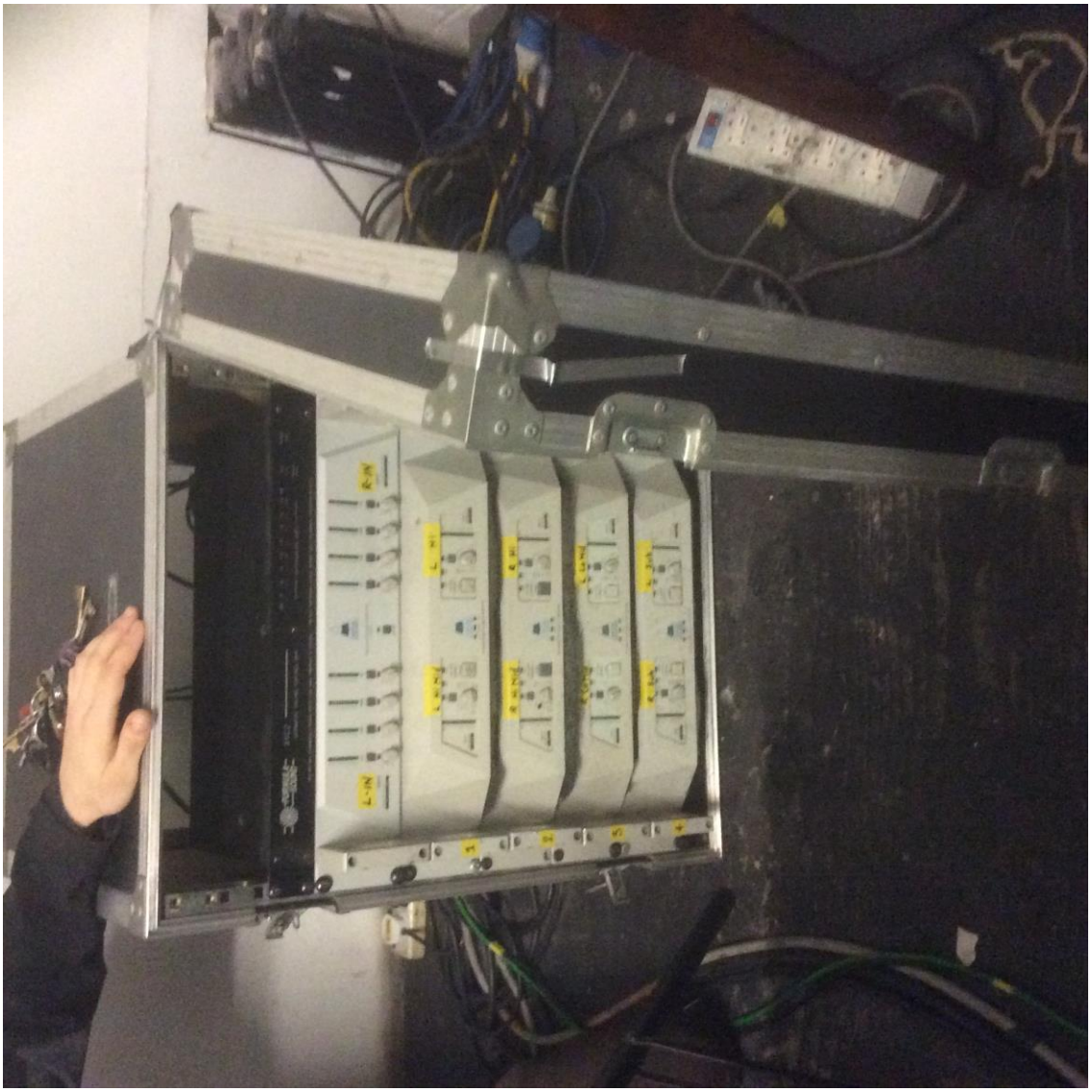

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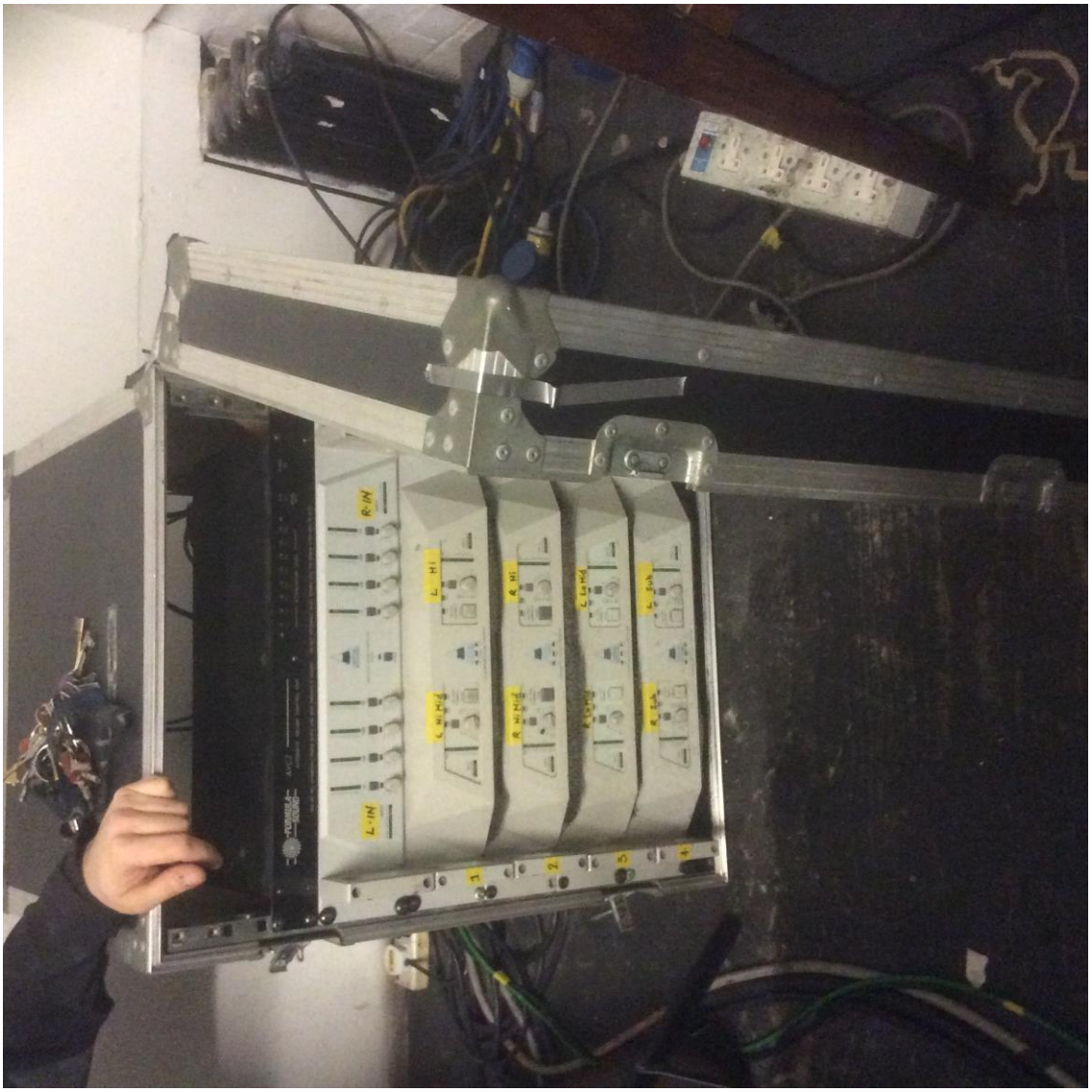

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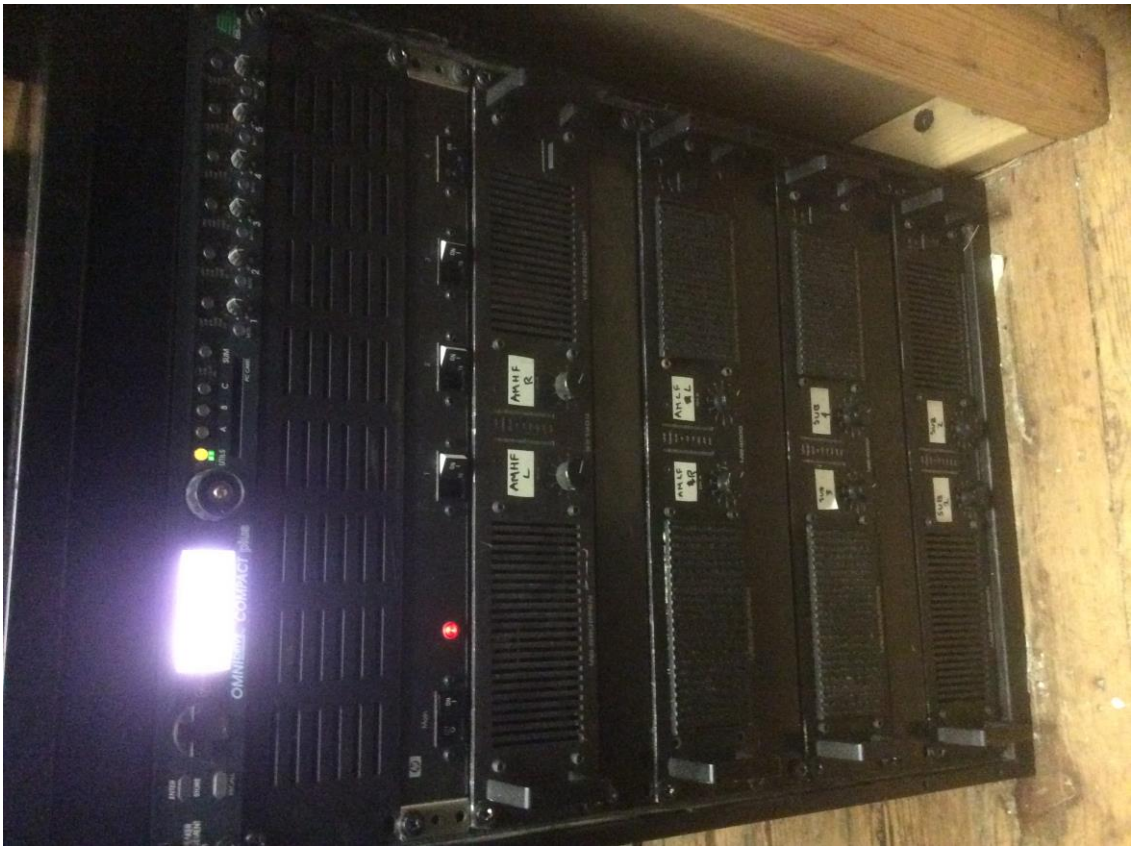

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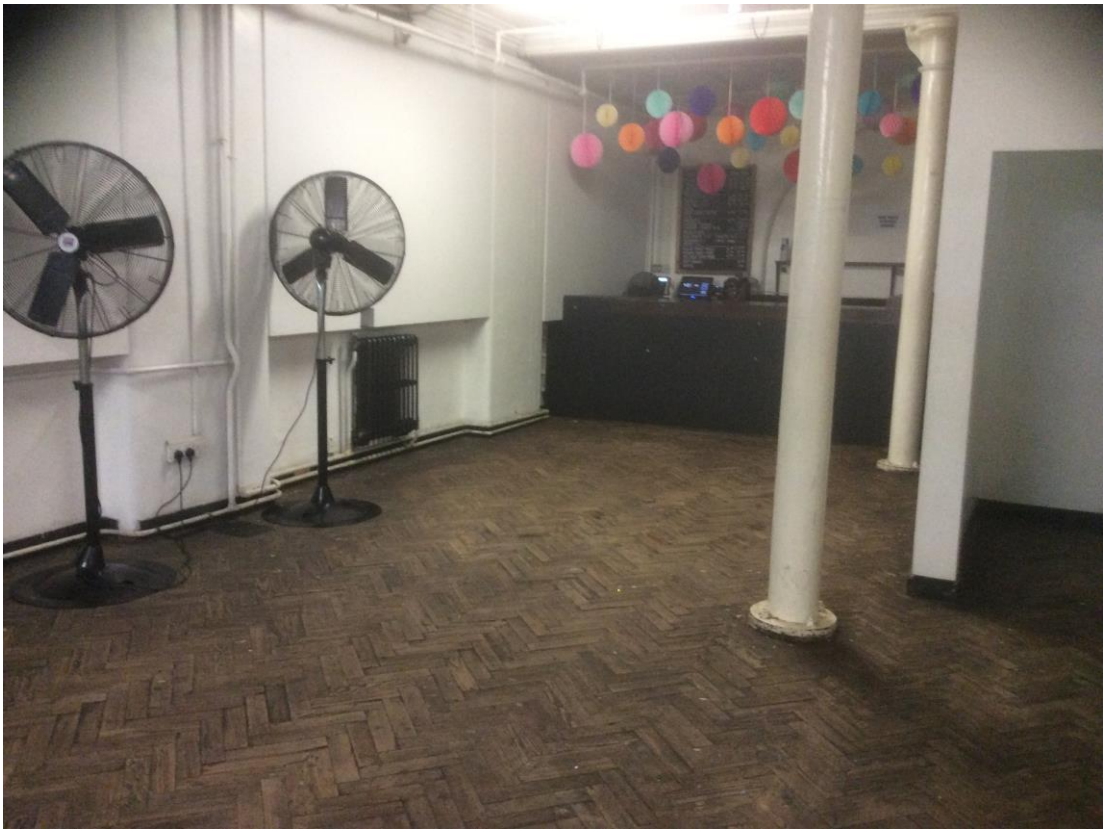

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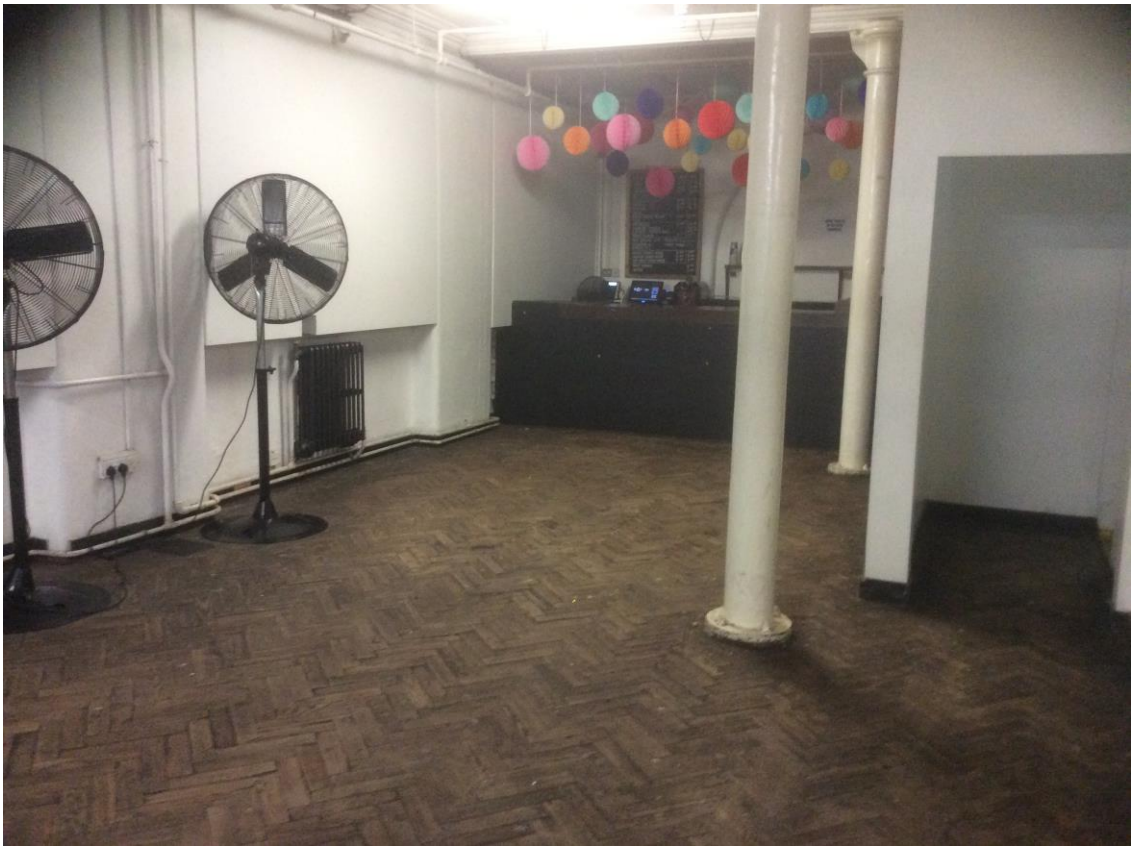

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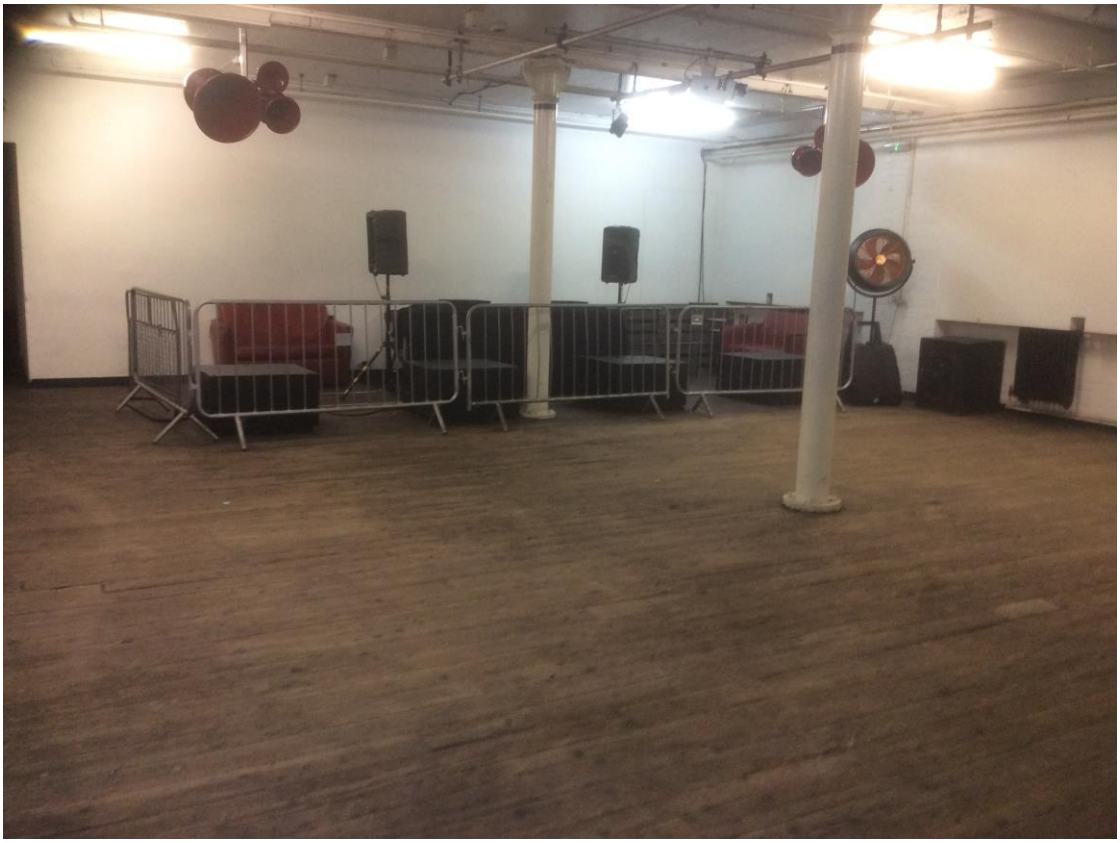

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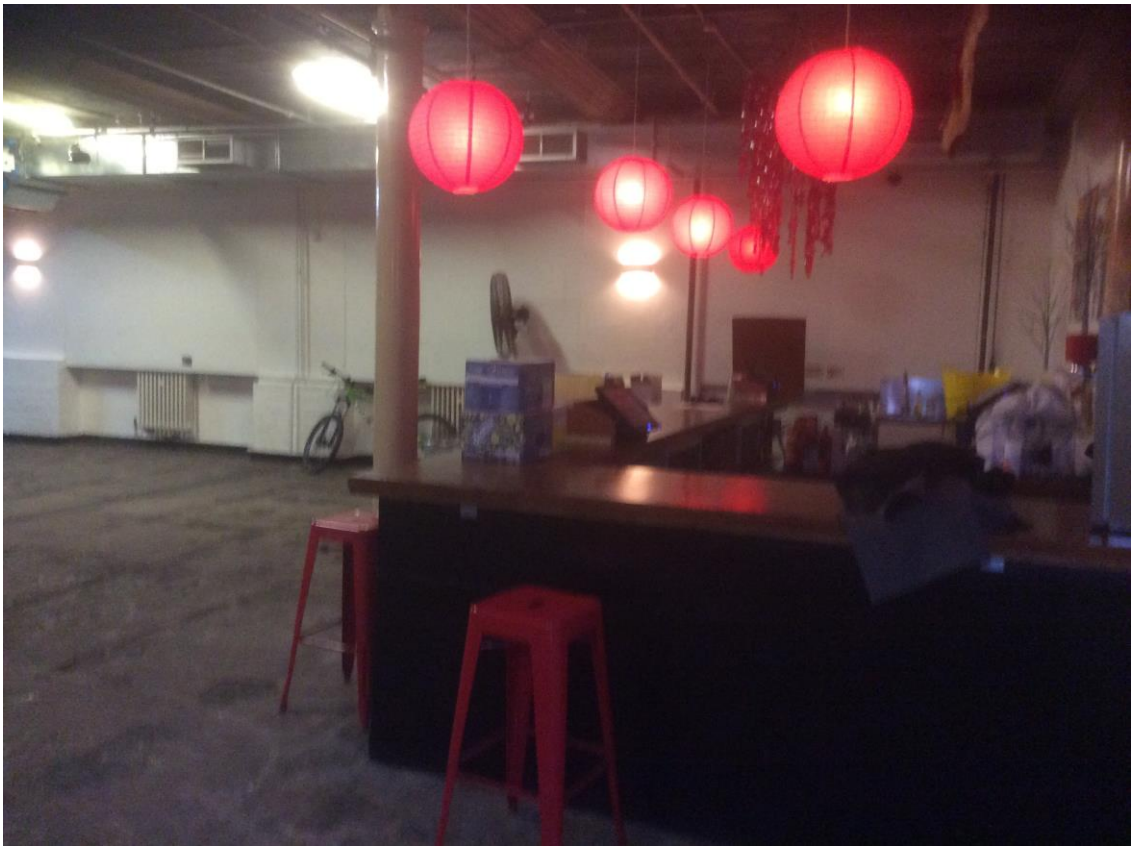

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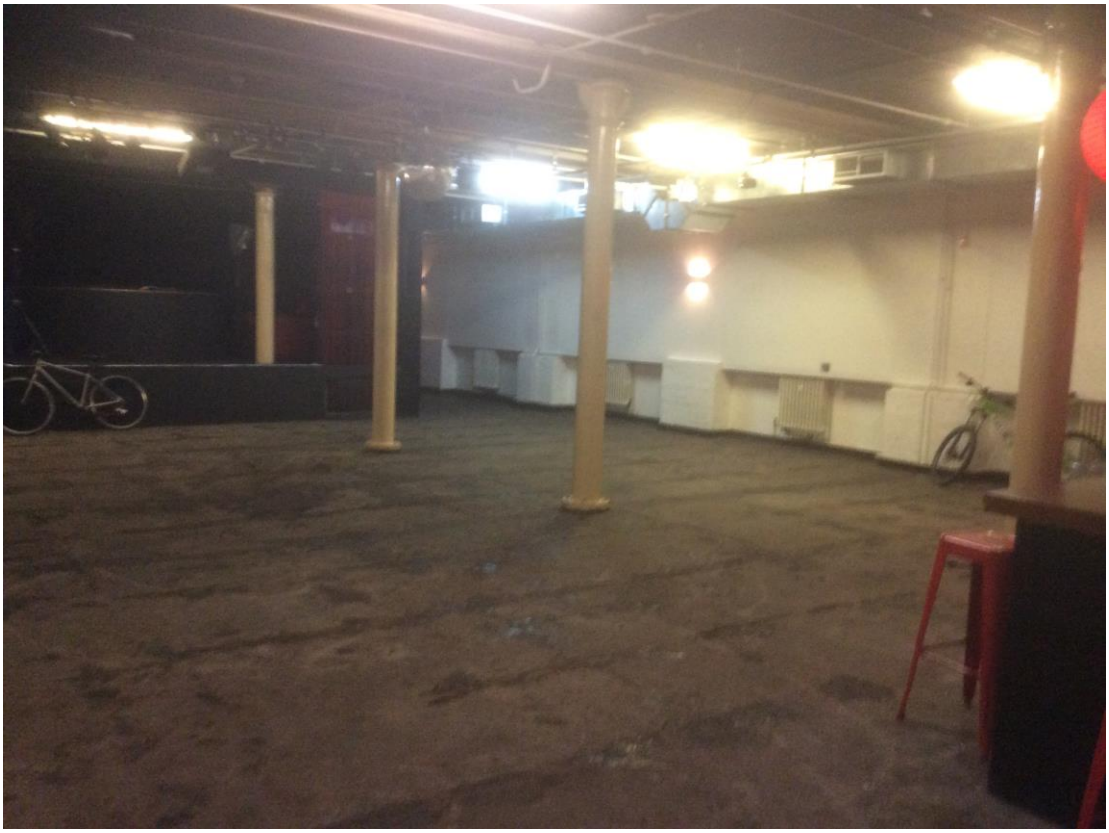

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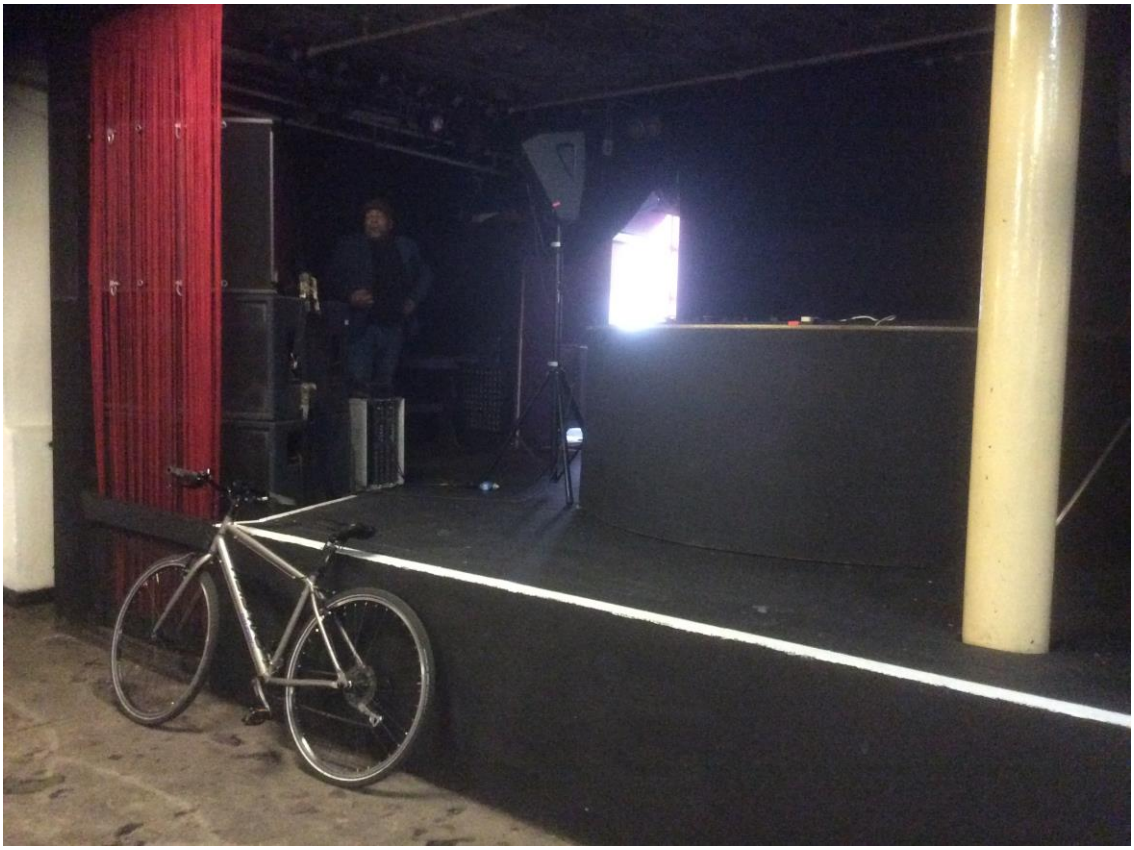

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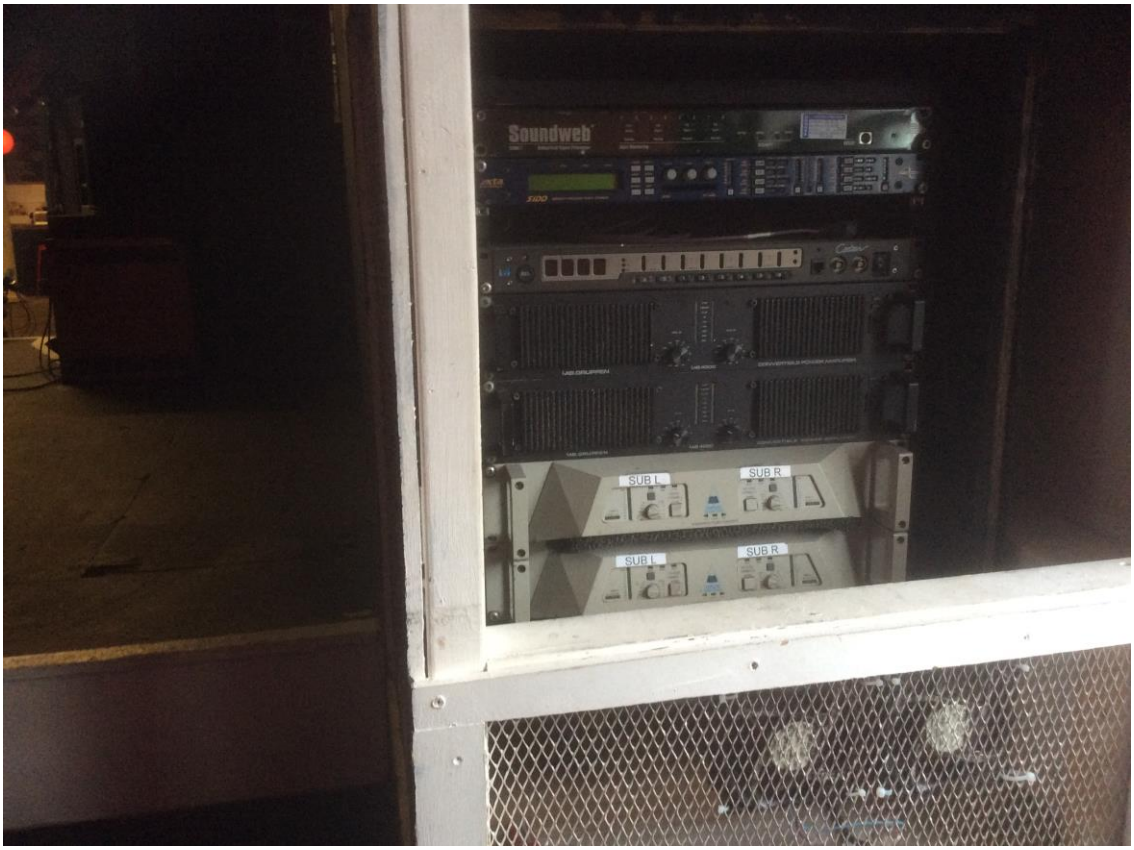

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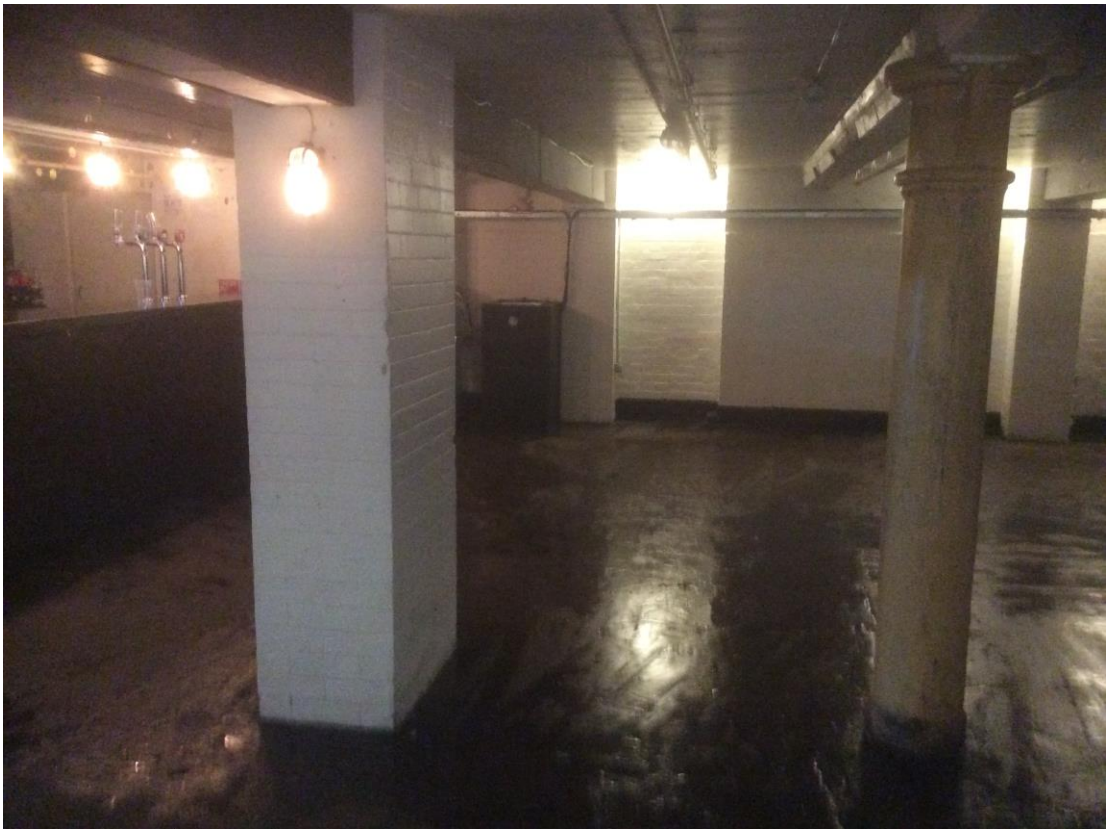

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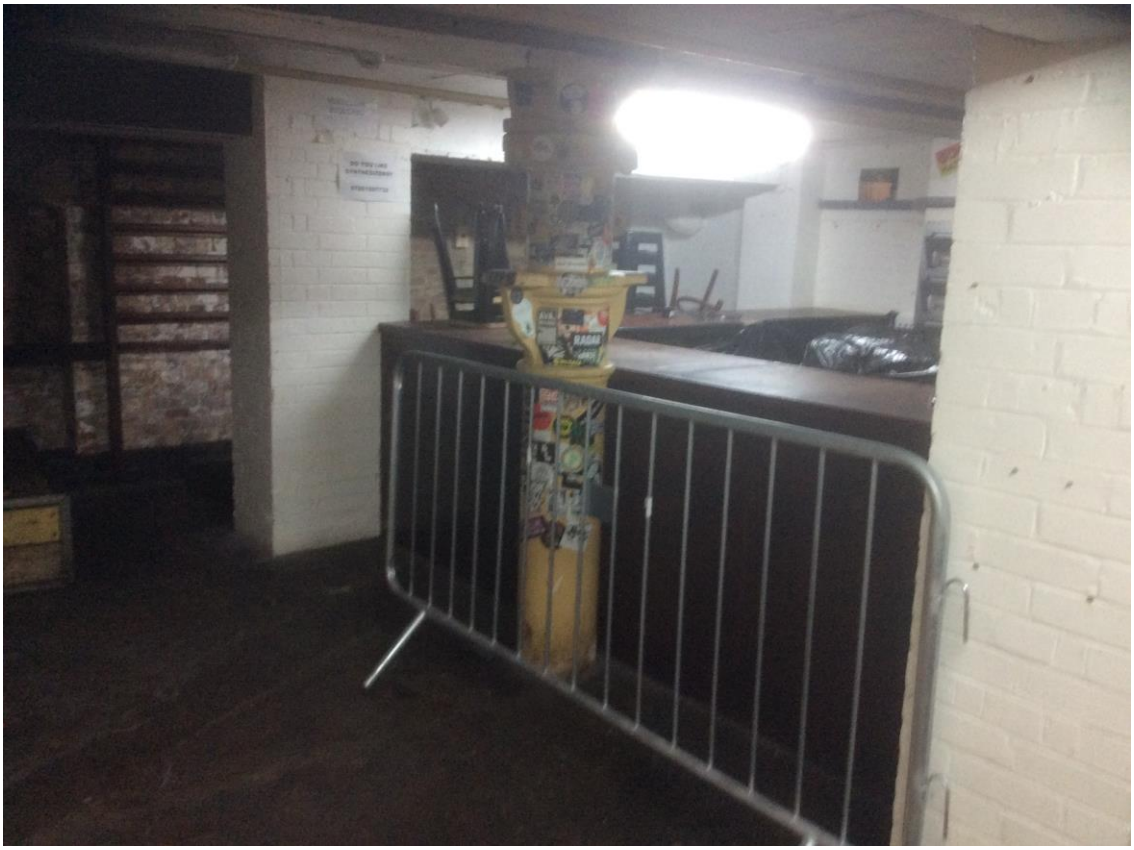

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25


Soundweb
crown
MACRO-TECH 1200
crown
MACRO-TECH 5000
crown
MACRO-TECH 5000

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Soundweb
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MACRO-TECH 1200
crown
MACRO-TECH 5000
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MACRO-TECH 5000

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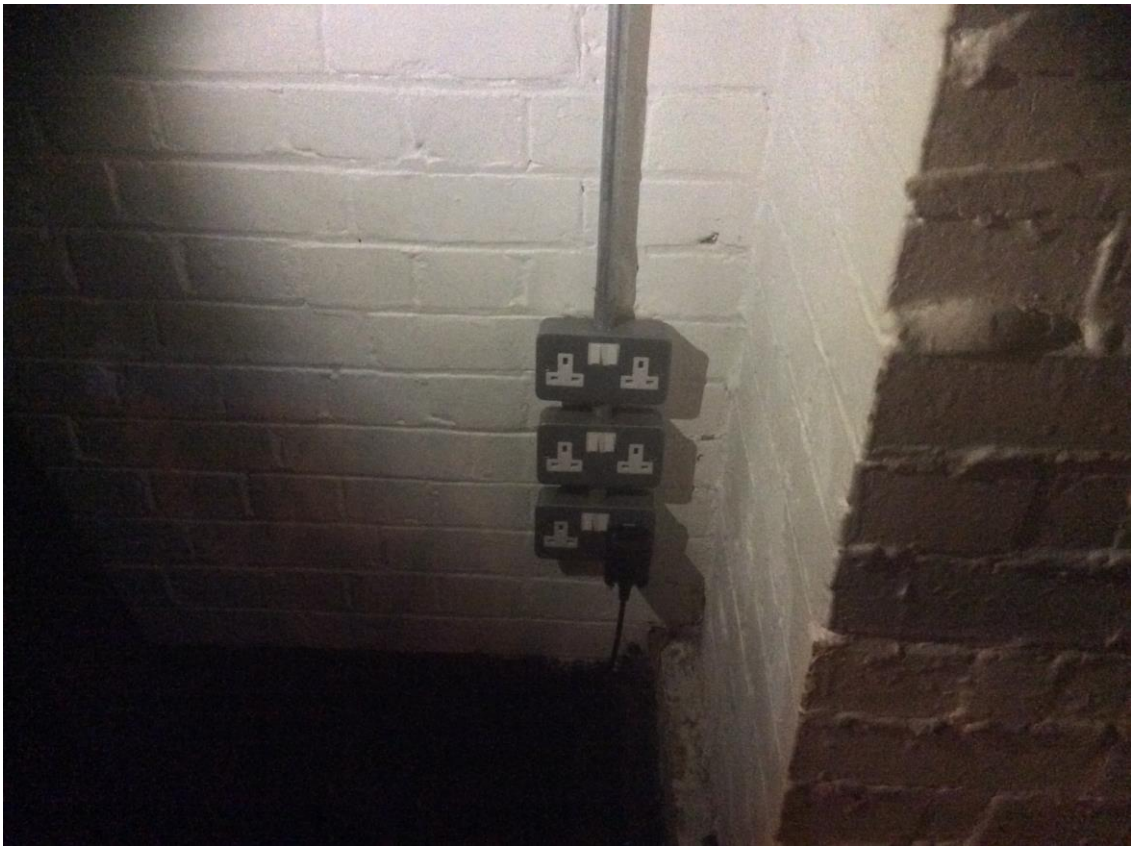

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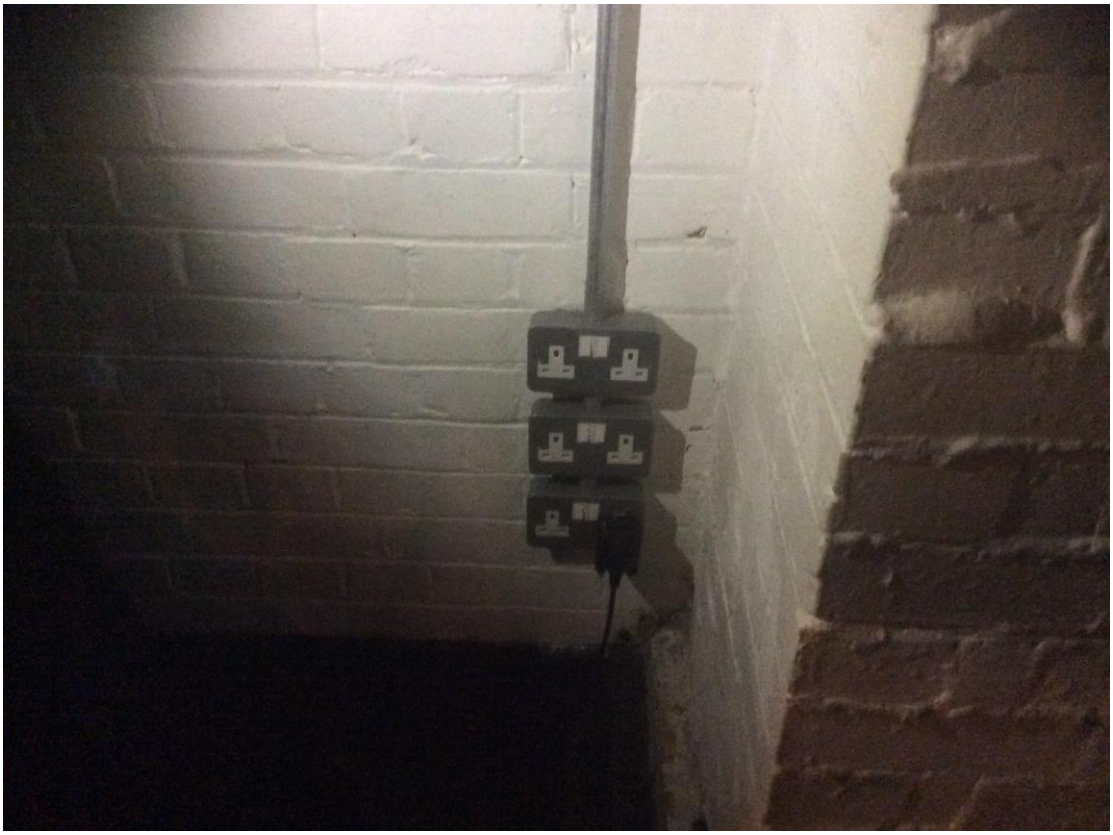

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Appendix 5

Correspondence sent to representatives for the Premises Licence Holder.

1, requesting confirmation in writing of the construction details of newly installed sound insulation.

From: Newman, Paul
Sent: Wednesday, January 11, 2017 10:52 AM
To: 'Mickey Smith'
Cc: Allday, Debra
Subject: Request for confirmation of construction detail of sound insulation at CLF Art Cafe

Hi Mickey

At our meeting on site you said you would provide me with confirmation by email of the materials used in the sound insulation panels over the windows at CLF Art Cafe.

Please would you kindly provide me with this?

Many thanks and kind regards

Paul Newman
Principal Environmental Health Officer

2, seeking confirmation that the sound limiters cannot compensate for absorbtion.

From: Newman, Paul
Sent: Wednesday, January 11, 2017 11:32 AM
To:
Cc: 'Mickey Smith'; Allday, Debra
Subject: Technical questions about the sound limiters.

Hi David

I have some technical questions about the sound limiters for Max.

Essentially I want to know if the signal trimming level in the sound limiters can automatically compensate for additions and reductions in internal sound absorbance as the space fills up with people, and as it empties.

Please would you kindly put me in touch with Max. I will copy you in to the email correspondence.

Many thanks and kind regards

Paul Newman
Principal Environmental Health Officer

3, requesting directions on format and delivery of copies photographs requested

From: Newman, Paul
Sent: Thursday, January 12, 2017 2:25 PM
To:
Cc: Allday, Debra
Subject: Photographs of visit

Hi David

There are 35 photographs totaling 36 Megabytes. When compressed as a WinZip file, it is 29.5 MB approx.

How would you like to receive these photographs?

Kind regards

Paul Newman
Principal Environmental Health Officer

4, requesting evening appointment for second visit, technical query about the reverberation times inside CLF, and reminder of non reply to emails 2 and 3 above. Attachments: copies of emails 2 and 3 above.

From: Newman, Paul
Sent: Monday, January 16, 2017 10:30 AM
To:
Cc: Earis, Richard; Prickett, Mark; Allday, Debra; Tear, Jayne
Subject: CLF Art Cafe notice of adjournment

Hi David

I hope this finds you well.

1. Arrangements for complying with notice of adjournment

I would like to arrange a second visit to CLF while their sound engineer sets the limiters.

I would like to do this from around 10 pm on a weekday evening. I propose that a colleague will be inside the premises with a sound level meter to check LAEQ 1 min at the time the limiter is set. I will be making a subjective assessment from either the applicant for review's balcony, or from courtyard Thalia Court location as used by Vanguardia on their second report (location to be confirmed

to you by email once known, and before the visit). I will remain in touch with my colleague by text message during the tests.

I would like this to be done for each of the 5 separately limited systems (basement, first floor, two on the second floor, and third floor). I would then like to do a 6th subjective test with all the 5 systems operating at the same time.

Please would you contact the relevant people that will need to be present for CLF, and please suggest some convenient dates, and also let me have any comments or queries they may have.

2. Request for information from CLF sound engineer and/or Vanguardia

Please can you confirm whether or not the reverberation time of each of the licensed spaces is known (basement, first, second and third floor dance/theatre areas), and if not, please can you provide a working estimate that you would be prepared to use as a realistic assumption of the reverberation time.

For the basement, please can you confirm whether sound systems in the Basement venue are ever operated without the loose furniture present (couches and armchairs etc), and if so, please would you provide two estimates of the reverberation time, one with, and one without furniture present.

3. Reminder: correspondence not yet replied to

You will remember that I wrote to you on date and date (copies attached), but I have not heard from you. Please have you had the opportunity to consider these matters, and please would you kindly provide replies as soon as possible.

Many thanks and kind regards

Paul Newman
Principal Environmental Health Officer

Appendix 6

Floor plans of the licensed areas

Appendix 7
Premises Licence Holder response.

PROJECT NOTE

DOCUMENT CONTROL			
DOCUMENT TITLE	MUSIC NOISE PROPAGATION FROM CLF THEATRE SPACE	**REVISION**	R00
DOCUMENT NUMBER	VC-102316-EN-RP-0003	**ISSUE DATE**	24TH NOV 2016
PROJECT NAME	CLF THEATRE	**AUTHOR**	A QUIBELL
STATUS	ISSUE	**CHECKED**	M WHITE
ISSUED TO	MICKEY SMITH (CLF ART CAFÉ)	**PASSED**	M MURPHY

INTRODUCTION

1.1. Vanguardia have been commissioned by CLF Art Café to provide a follow-up assessment of the noise break-out from the CLF Theatre space on the third floor of the Bussey Building, 133 Rye Lane, Peckham.

1.2. An initial assessment was carried out in October 2016, details of which can be found in Vanguardia document ref. VC-102316-EN-RP-0001.

1.3. As per previous recommendations, the CLF Art Café have sought to improve the sound insulation performance of the CLF Theatre space, to reduce the potential noise impact on neighbouring residential areas.

1.4. Both assessments have been carried out by means of a noise propagation test from within the CLF Theatre space to a location representative of the nearest noise sensitive residence.

1.5. This report details the findings of the second propagation test, conducted during the night of 22nd/23rd November 2016.

SITE INFORMATION

2.1. The Bussey Building is surrounded by Rye Lane to the west, with a railway line to the north, the Copeland Industrial park to the east and Thalia Court and Chloe Court to the South. The residents of Thalia Court and Chloe Court are the nearest noise sensitive receivers to the Bussey Building.

2.2. The CLF Art Café occupies spaces on the 1st, 2nd and 3rd floor of the Bussey Building, with windows facing towards the residential properties to the south. All windows have been boarded up with layers of plywood and mineral fibre in order to improve the sound insulation

performance of the overall wall construction. On the 1st and 2nd floors, the same treatment has been applied to the outside of the windows as well.

2.3. The CLF Theatre occupies part of the third floor of the building. The theatre has a small PA system, including subwoofers arranged in a left-right stereo pair.

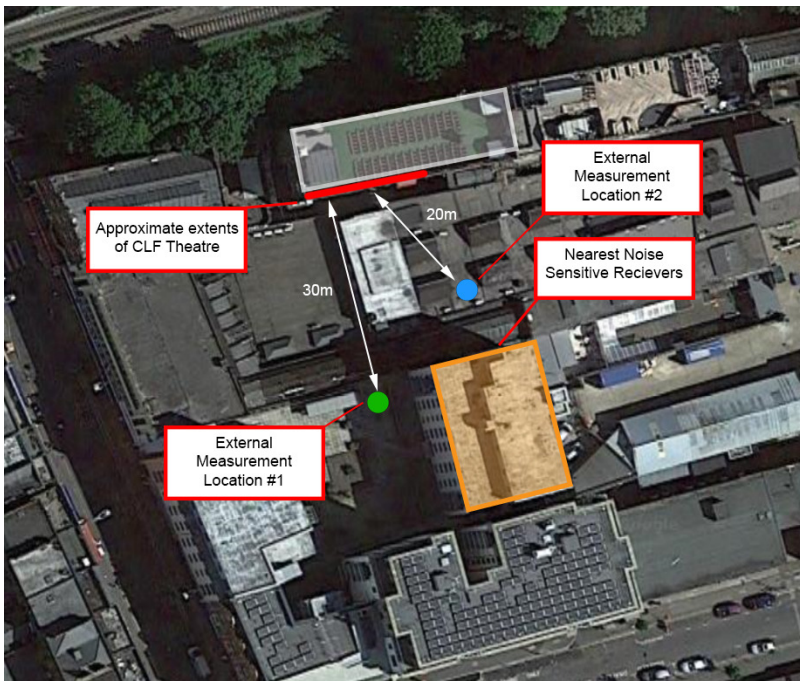
2.4. Since the initial assessment, additional sound insulation has been applied to the internal faces of the CLF Theatre windows.

MEASUREMENTS

3.1. Measurements took place on the night of Tuesday 22nd/23rd November between 23:30 and 01:00.

3.2. External measurements were taken from the roof of 135 Rye Lane, approximately 10m from the window of the nearest noise sensitive receivers at Thalia Court. The location is marked as External Measurement Location #2 on Fig. 1 below.

Figure 1 Site location plan showing external measurement positions for both assessments



3.3. Music noise levels were monitored internally with the use of an NTi Class 2 XL2 sound level meter. External measurements were taken with a Larson Davis LxT Class I sound level meter.

3.4. Using the installed PA system, full-range music was played within the theatre space and monitored both internally and externally in time-synchronous 1-second and 1-minute time periods.

3.5. The existing ambient and background noise levels were continually sampled in between measurements of music noise, in order to assess the contribution of music noise.

3.6. Notes were taken on the subjective impression of the noise, as well as any contaminating noise sources. In this way, a judgement could be made on the contribution of music noise in the total measured noise level.

RESULTS

4.1. Table 1 below summarises the measurements taken. The sound propagation to the external measurement position was measured for five different internal levels in 3dB increments between 94dB and 106dB.

4.2. The existing ambient (dB LA_{eq}) noise levels were sampled before and after each measurement of music noise. Train movements in and out of Peckham Rye station became less frequent between measurements 3 and 4, resulting in lower ambient noise levels.

Table 1 Results of propagation test.

Measurement	Existing Ambient Noise Level dB $LA_{eq, 1min}$	Internal Music Level dB $LA_{eq, 1min}$	External Measured Music Noise Level dB $LA_{eq, 1min}$	Comments
1	42	94	43	Music Inaudible at measurement position
2	42	97	42	Music inaudible at measurement position
3	41	100	42	Some low frequency noise perceptible
4	39	103	41	Music just audible
5	39	106	42	Music audible

DISCUSSION

5.1. Measurements 1 to 3 demonstrate that internal music levels of up to 100dB(A) have minimal impact on the existing noise levels. For measurements 1 and 2, music noise was inaudible at the external measurement position. For measurement 3 (100dBA internal level), some low frequency noise was just perceptible, but not measurable above the existing ambient noise.

5.2. Events such as cinema, theatre, spoken word and acoustic music performances are unlikely to exceed 100dB(A) for more than short periods. The low-frequency content of these types of material is substantially lower than in amplified dance music, as used for this propagation test. It is therefore felt that for the majority of events in the CLF Theatre, there will be no noise impact on the nearest residents.

5.3. Measurement 4 represents the upper end of internal music levels for a dance music club night. At this level, the music noise was just audible above the existing ambient noise at the external measurement position. It can be seen that a small increase in the ambient noise level of 2dB can be attributed to the music noise from within the CLF Theatre space. It is not felt that this increase would be likely to cause disturbance within the residences of Thalia and Chloe Court.

5.4. Measurement 5 represents the maximum level achievable (106dBA) within the CLF Theatre space with the currently installed PA system. At this internal level, music is audible at the external measurement position. However, the increase in noise level is still within 3dB above the existing ambient noise level.

5.5. Playing music at this level over long periods would cause damage to the PA system, and is therefore very unlikely to occur for more than short time periods.

CONCLUSIONS

6.1. The previous assessment found that for the majority of intended program for the CLF Theatre, music noise would be just audible. As a result of the additional sound insulation that has been installed on the third floor windows, internal levels of up to 103dB(A) can now be achieved without significantly impacting the nearest residences.

6.2. The maximum achievable output of the CLF Theatre sound system is between 103dB(A) and 106dB(A). Music played at this level was found to be audible above the lowest ambient noise measurements at the nearest residences. The only measurable increase in noise levels is in the 63Hz and 125Hz 1/1 Octave bands.

6.3. The additional sound insulation that has been installed in the CLF Theatre space has successfully reduced the noise break-out to the nearest residential premises. At internal music levels of up to 103dB(A), the noise measured at the nearest neighbouring properties is unlikely to cause disturbance to the residents.

Registered in England 05666276

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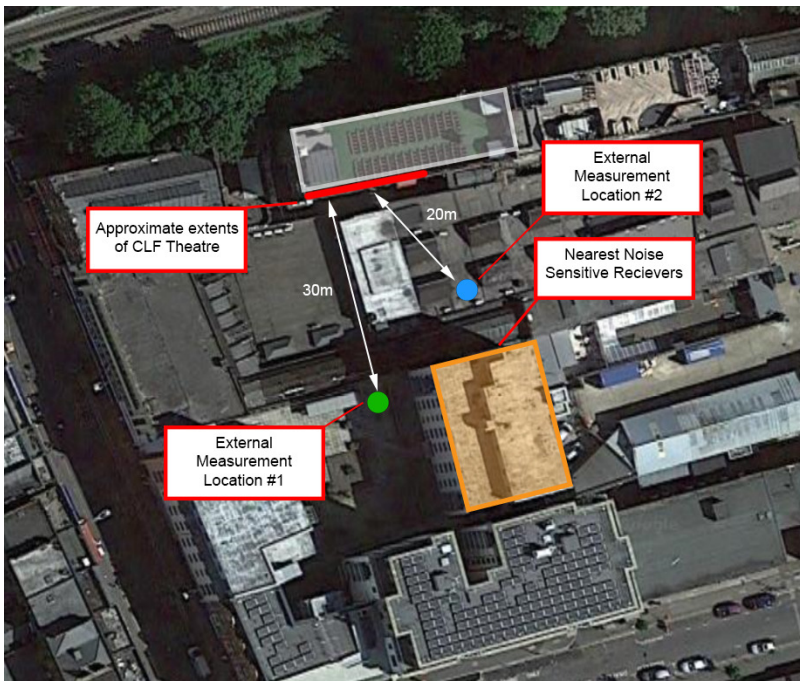

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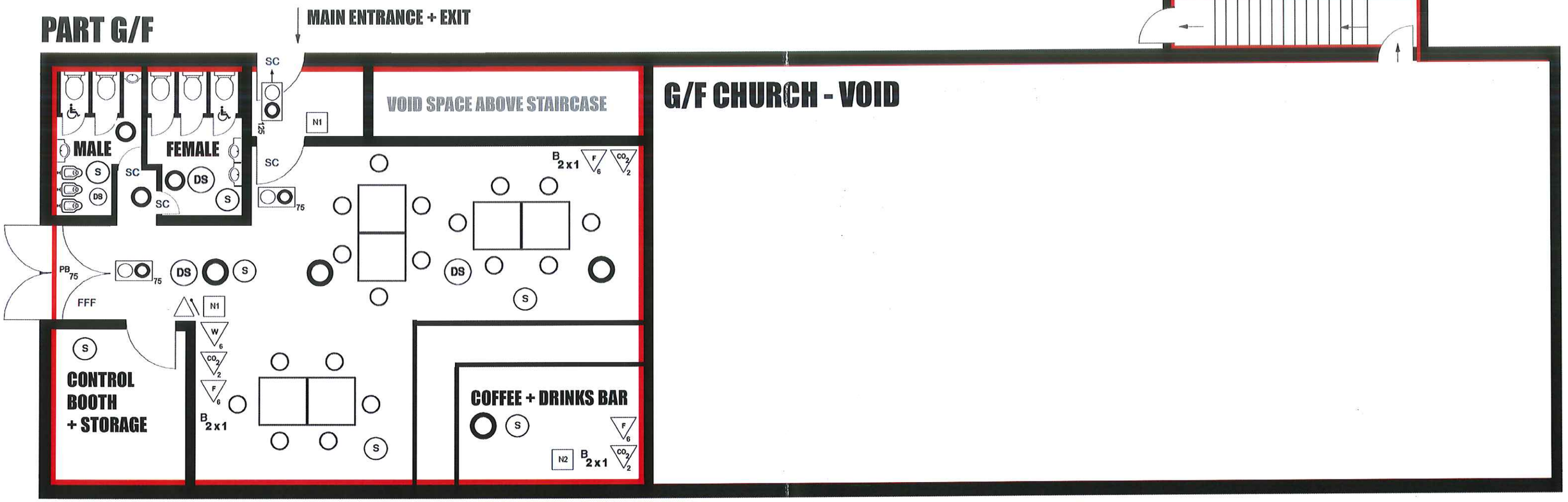
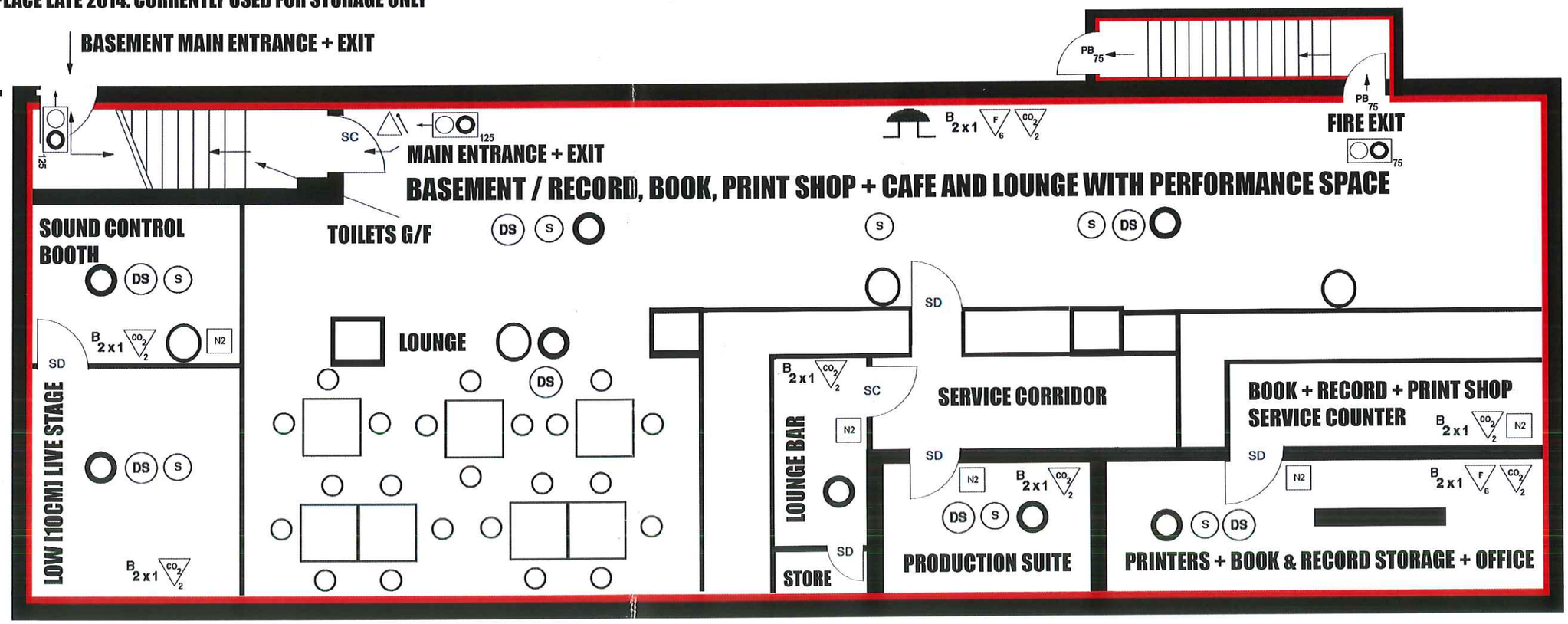
PART G/F



NOTE: G/F CONVERSION TO TAKE PLACE LATE 2014. CURRENTLY USED FOR STORAGE ONLY

BASEMENT



Property Details:
PART G/F + BASEMENT
CLF ART CAFE,
BLOCK A, BUSSEY BUILDING,
133 COPELAND RD,
SE15 3SN

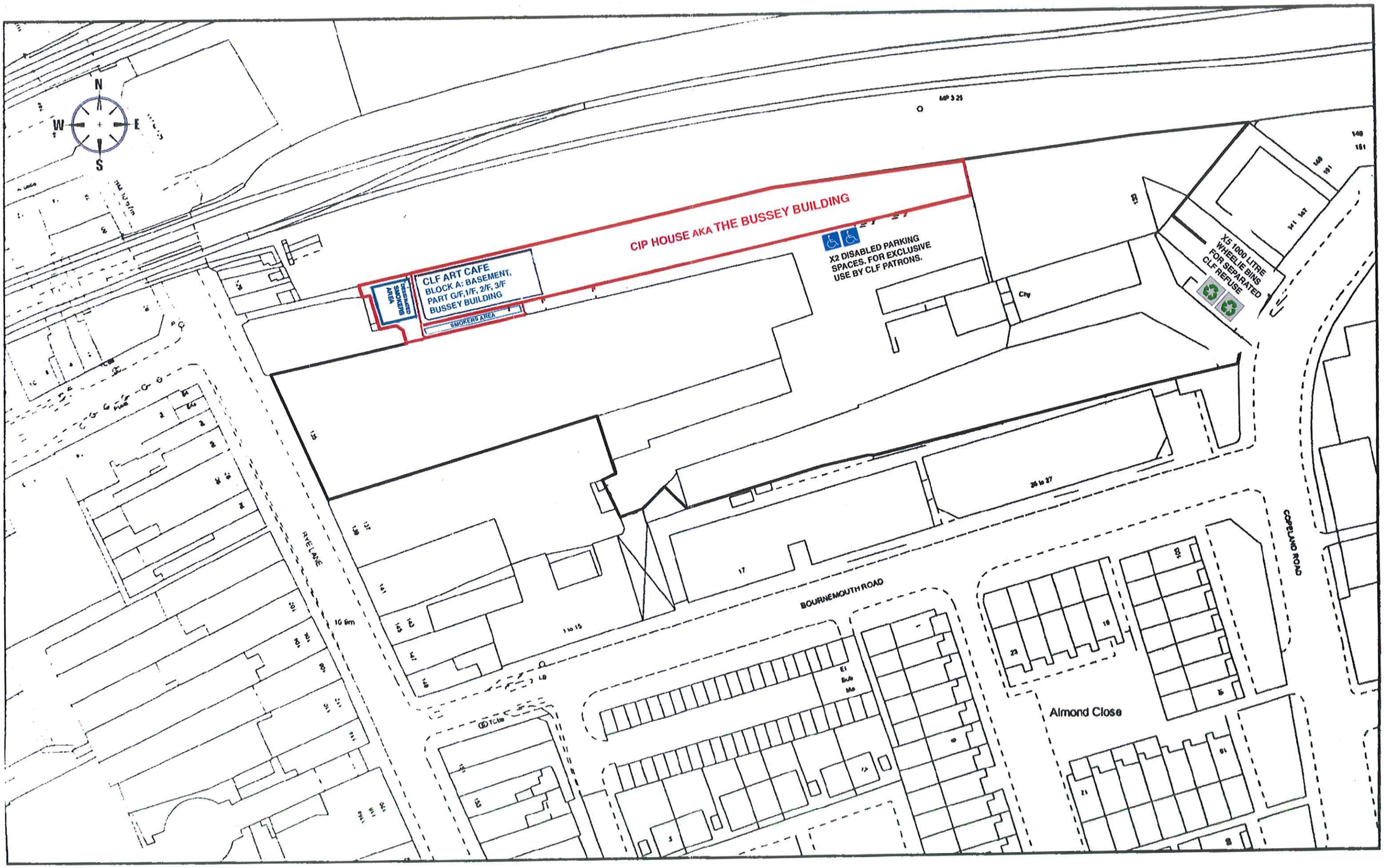
SCALE
1:100 @ A3

Plans Drawn: 01/11/2013

DRAWN BY
CHRONIC ARTCHITECTS

UNIT A1.1 CIP HOUSE,
133 COPELAND RD,
LONDON SE15 3SN
020 7732 5275
E: INFO@CLFPLANET.COM

Scale 1:1250


N
W
E
S
CIP HOUSE AKA THE BUSSEY BUILDING
CLF ART CAFE
BLOCK A: BASEMENT,
PART G/F,1/F, 2/F, 3/F
BUSSEY BUILDING
SMOKERS AREA
DESIGNATED SMOKERS AREA
X2 DISABLED PARKING SPACES. FOR EXCLUSIVE USE BY CLF PATRONS.
X5 1000 LITRE WHEELIE BINS FOR SEPARATED CLF REFUSE
RYE LANE
BOURNEMOUTH ROAD
COPELAND ROAD
Almond Close