SECURING THE FUTURE OF OUR HQ.

Institution of MECHANICAL ENGINEERS

Improving the world through engineering



AGENDA

- 1. Introduction to the RESG team and overview of the project
- 2. Project opportunities
- 3. Member engagement to date
- 4. Process to date
- 5. Summary of proposed enhancements to building
- 6. Governance process and next steps
- 7. Final discussion and close

WHO ARE RESG



Helena Rivers Trustee



Terry Spall
Past President



David Nowell Trustee



<u>Philip Goodge</u> Head of Building Services



Ruth Shilston Council



Frank Mills Council



Sean Fox
Finance and Commercial Director



Benjamin Ralph
Construction & Building Services
board

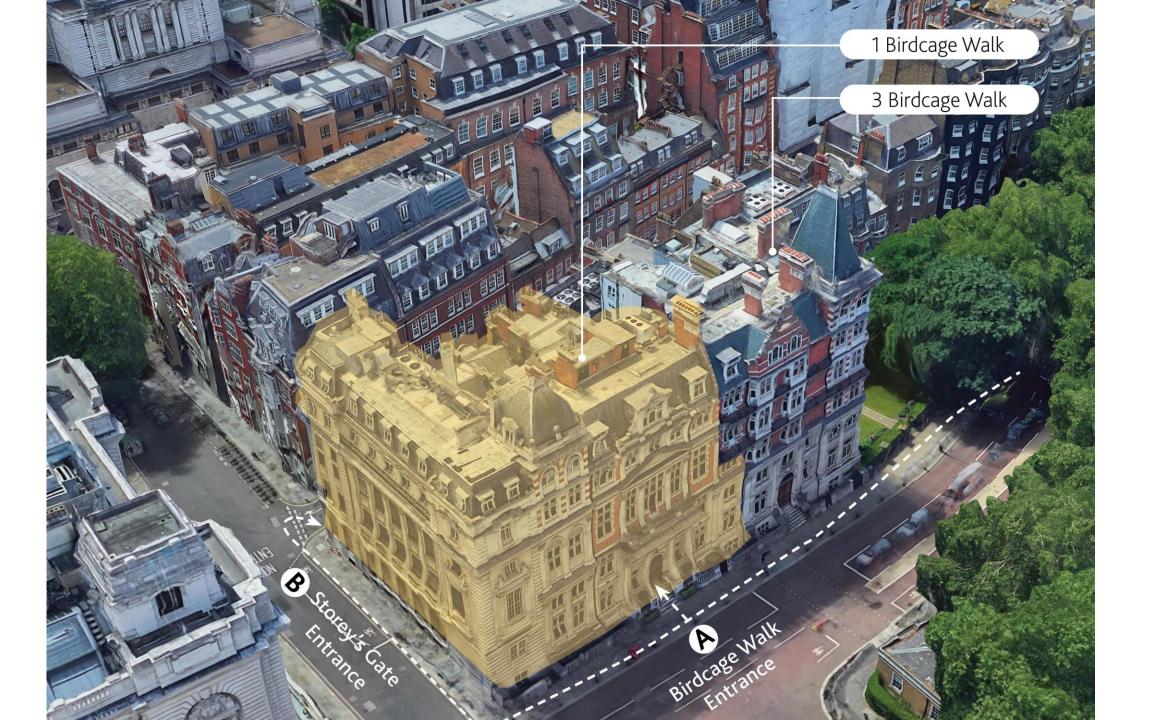
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THE CHALLENGE.

Refurbishment work is urgent

- Building is 122 years old and needs extensive modernisation and refurbishment to remain in use
- Initial canvassing shows members have a strong attachment and want to keep it as our HQ
- The work is estimated to cost £16 million, unaffordable from free reserves
- Major decisions regarding the building need 2/3 majority support - doing nothing is not an option
- This proposal has best chance of securing 2/3 majority we need to go forward

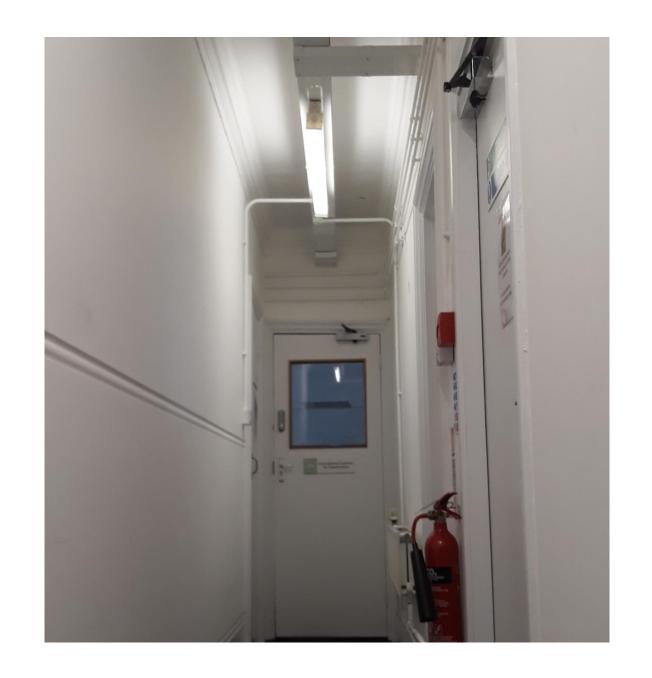




3 BIRDCAGE WALK.

Bought by IMechE in 1958

- 3BW was formally joined to 1 BCW in 1960
- Space has been used for staff offices and rented to tenants
- Offices and facilities are dated and no longer fit for purpose
- Only areas in 3BCW available for members are meeting rooms on the lower ground floor
- Replacement member meeting rooms will be available in 1BCW



OPTIONS APPRAISAL

- A physical home for the charity
- A workplace for staff
- A meeting place for members
- A location which supports influencing Government
- A location which engenders pride
- A building which showcases engineering best practice

Option	Proposal	Impact	Risks	Opportunities
1	Stay in OBW – no change	Major investment needed Old fashioned / non-optimised space for staff and members Refurbishment costs force a reduction in Learned Society activity	Low return on external rents Inefficient working Inability to raise funds	Little interruption Continue existing rentals
2	Keep 1 and move out of 3 Birdcage Walk	All staff and member services moved into 1BCW. Will requires moves and major works	Significant investment still needed to 1BCW Short term loss of rental revenue	Improved staff and member space. Improved efficiency. Reduced operating costs
3	Sell OBW	Move to a new location	Unpopular with members Lose prestige of Institution	Modern, bespoke facility in cheaper location, lower operating costs

ACHIEVING CHARITABLE AIMS THROUGH THE PROJECT

- Educational Opportunities
- Low Carbon Solutions in a heritage setting
- Augmented Reality/Digital Twin





OVERVIEW MEMBER ENGAGEMENT TO DATE

Detailed survey of most active member groups:

- Past presidents
- Trustee Board
- Council
- Young Members Board

Member communications (March 21 onwards):

- Launch of webpage
- Article in PE
- Features on social media
- All calling for feedback



To reassure you, those who want to regularly work at HQ will still be given that opportunity. Providing staff with good quality space (which they do not have currently) is one of the drivers for this project.

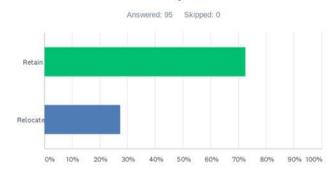
The Institution does provide generous wellbeing benefits and initiatives in addition to consultation with staff. It will bolater its current efforts to safeguard mental health try training more mental health first-aiders and providing more information resources where available. It is also worth noting that as a Trustee on the Diversity and Inclusion group. I have been liaising regularly between both groups, especially around accessibility in all its forms.

Your comments around communication are valid, I understand that the facilities department have ensured that adequate workspace is available when staff work from the office to ensure they can effectively support members. Concerning the proposals focused on the building, staff will receive regular communication updates to ensure they are involved in the consultation about the building and their work environment. Employee surveys have shown that staff are confortable talking to their managers, their employment engagement representative, and the

REAL ESTATE STRATEGY GROUP QUESTIONNAIRE

Real Estate Strategy Group Questionnaire

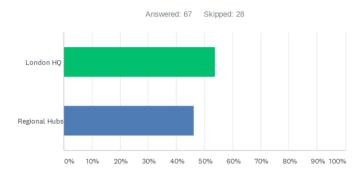
Q11 Would you prefer to retain OBW or move to a modern purpose built facility?



ANSWER CHOICES	RESPONSES	
Retain	72.63%	69
Relocate	27.37%	26
TOTAL		95

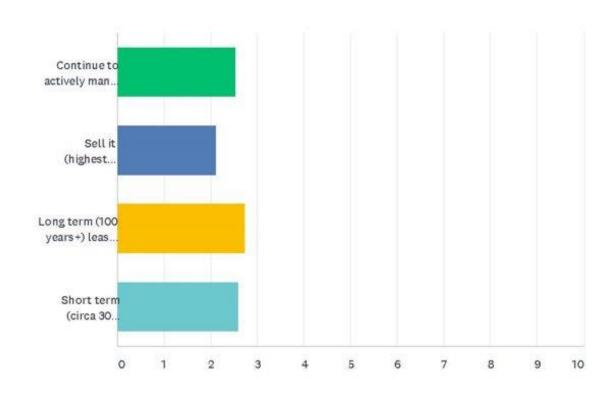
Real Estate Strategy Group Questionnaire

Q12 If relocate would you support investing in a new London based headquarters of a similar size or a series of regional 'hubs'?



ANSWER CHOICES	RESPONSES	
London HQ	53.73%	36
Regional Hubs	46.27%	31
TOTAL		67

REAL ESTATE STRATEGY GROUP QUESTIONNAIRE



- No 3 Birdcage Walk (3BCW) is no longer needed by the Institution for office space.
- It has until recently been largely rental space but is now in a poor state of repair
- Members were consulted on what they would like to do with 3BCW

SOCIAL MEDIA

Social media and website used to engage with members

Lots of responses so far





"The goal is to create a modern, inspiring HQ which allows us to maximise our impact on government and society at large. A building which is welcoming to our members and the public and is accessible to all."

Our headquarters is 122 years old and needs extensive refurbishment for us to continue to be able to use it. Canvassing of our members shows a strong attachment to the building and a desire to retain it as our HQ. We are proposing to grant a long-term lease of 3 Birdcage Walk to fund the refurbishment of 1 Birdcage Walk, which was our original HQ in London. The Trustees have agreed this is a significant decision which needs to go to a member vote.

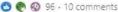
Valued members, we need you.

Find out more details by logging into the members' area of our website to see a recently updated and dedicated page about the project.

#IMechE #MechanicalEngineering #BirdcageWalk #StJamesPark #SecuringTheFuture







Reactions











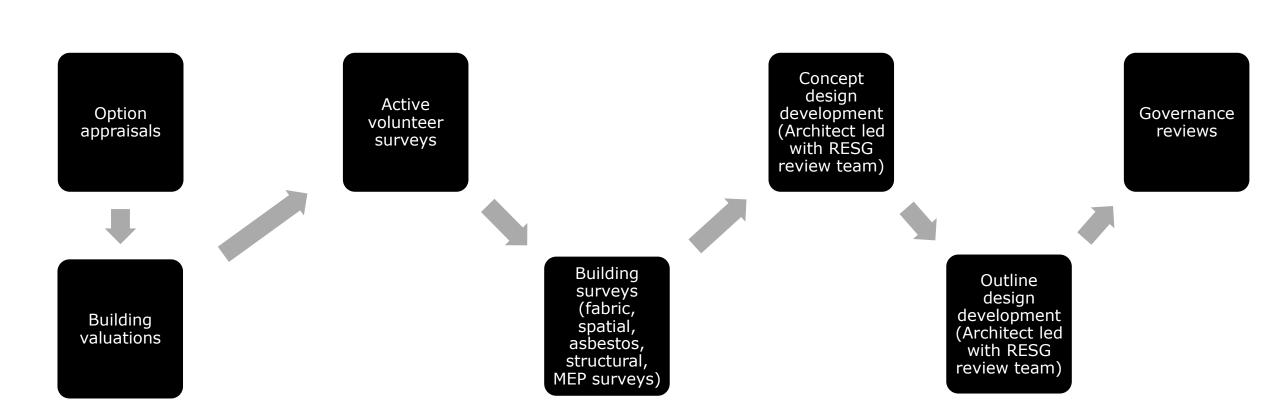








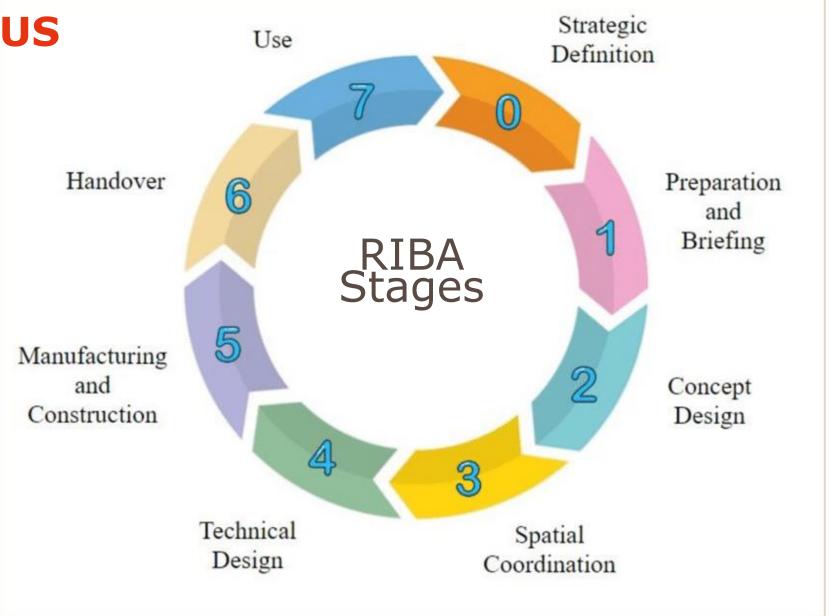
WORK DONE TO DATE



CURRENT STATUS (TECHNICAL)

To test our cost and design assumptions we have developed the proposals to RIBA 2.

If members wish to go ahead, there is a lot of refinement still to come.



Listening to your feedback

Welcome members

- Creating a dedicated members' lounge
- Exhibition space and café seating in reception

Making the building accessible to all

- Building a ramp for wheelchair users adjacent to the main entrance
- A new lift accessing all floors









OUR PRIORITIES.

Listening to your feedback

Address carbon challenge

 Making 1 Birdcage Walk as low carbon as possible for a heritage building

Build in flexibility

- Retractable seating in lecture theatre
- Removable walls in meeting rooms
- IT infrastructure all rooms equipped for hybrid meetings

IMechE | Look & Feel / Initial Ideas

03 LECTURE THEATRE **CONCEPT**

















DESIGN - KEY FEATURES

Lower Ground Floor – Opening up of space to join marble hall and dining area

Ground Floor – Retractable seating, wheelchair entrance, exhibition space, café style seating

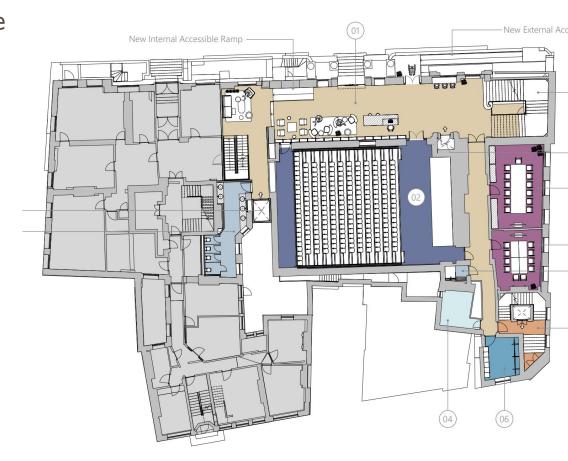
2nd Floor – New members lounge adjacent to library

4th Floor – New meeting rooms, new staff space

5th **Floor** – All new staff space designed for agile working.

Roof – Open up for roof terrace

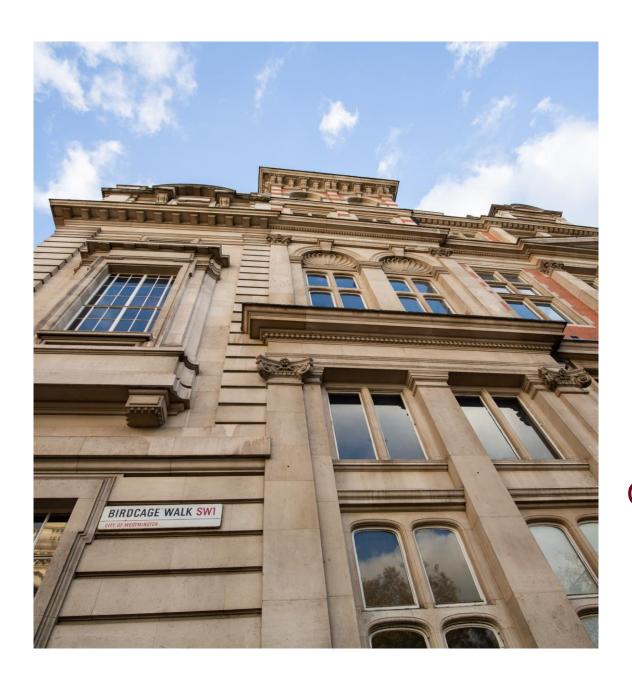
Throughout – New lift, toilets on each level



GOVERNANCE

- Finance Board
- Strategy Committee
- Audit and Risk Committee
- Red Review
- Council
- Consultation and Vote
- Future Gateways





NEXT STEPS

Key dates in our plans

Item	Date
End of consultation	Nov 2021
Member vote	January 2022?
Design, planning, permissions, governance	March 2022 – Sep 2023
Start of construction	Q4 2023
End of construction and reoccupation	Q4 2024

- Webinars
- Website
- Email

QUESTIONS



THANK YOU.



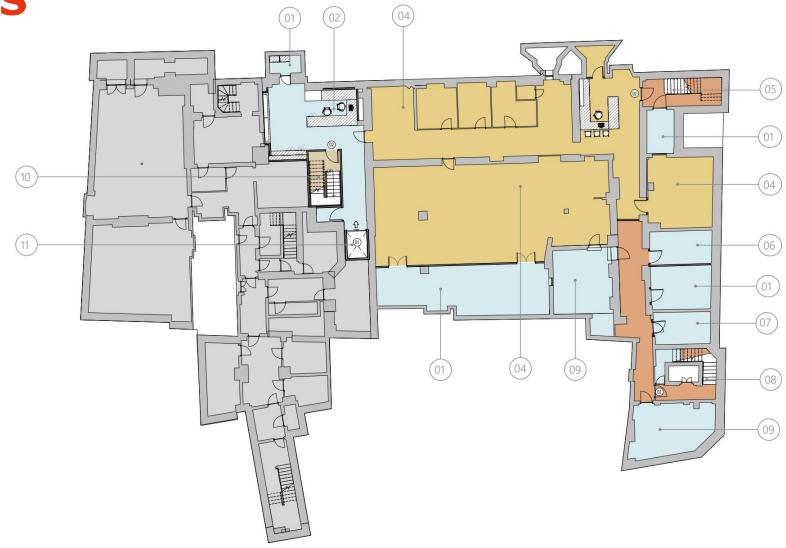
Birdcagewalk@imeche.org

For more information, please visit the Members' area of the website.

- f /imeche
- /imeche
- /imecheuk
- /imecheteam
- in /institution-of-mechanical-engineers

Layout Strategy Basement

- 01 Storage
- 02 Reprographics
- 03 Secondary Stairs
- 04 Archive
- 05 Staff Stairs
- 06 Comms Room
- 07 Bins Room
- 08 Staff Stairs
- 09 Plant Room
- 10 Secondary Stairs
- 11 Lift Access
- Members/ Visitors Circulation
- Staff Circulation (access controlled)
- Meeting Space
- Catering
- Members Learning & Development
- Open Workplace
- Enclosed Workplace
- Roof garden
- Storage / Support
- Facilities (Toilets, Changing Rooms, etc.)
- Wellness (Bike Store, Relaxation Room, etc.)
- Archive
- New Lease 3 Birdcage Walk





Layout Strategy Lower Ground Floor

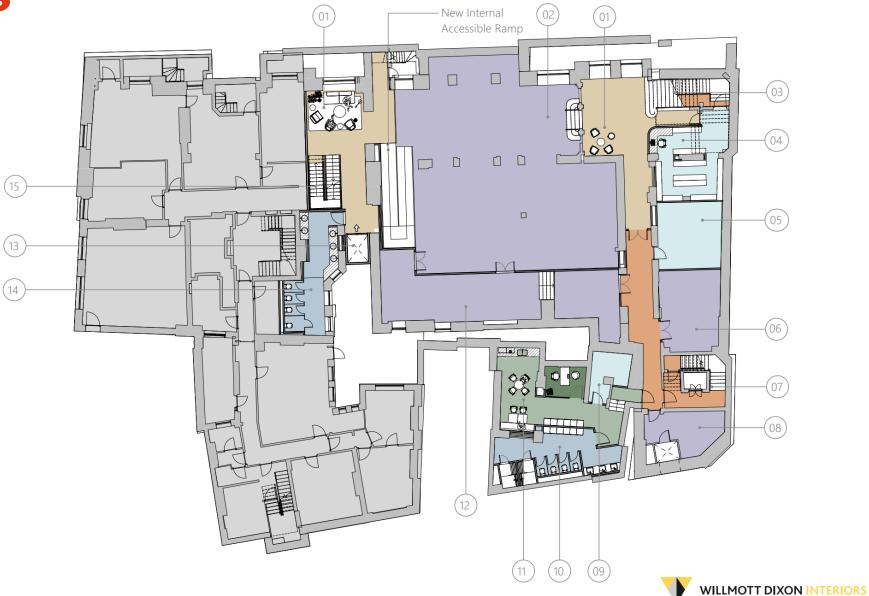
01	Lounge	12	Catering Kitchen
02	Marble Hall	13	Lift Access
03	Main Stairs	14	Toilets
04	Cloak Room	15	Secondary Stairs
05	Furniture Storage		
06	Catering Washing Area		
07	Staff Stairs		
80	Catering Storage		
09	Storage		

Members/ Visitors Circulation Staff Circulation (access controlled) Meeting Space Catering Members Learning & Development Open Workplace Enclosed Workplace Roof garden Storage / Support Facilities (Toilets, Changing Rooms, etc.) Wellness (Bike Store, Relaxation Room, etc.)

Archive

New Lease 3 Birdcage Walk

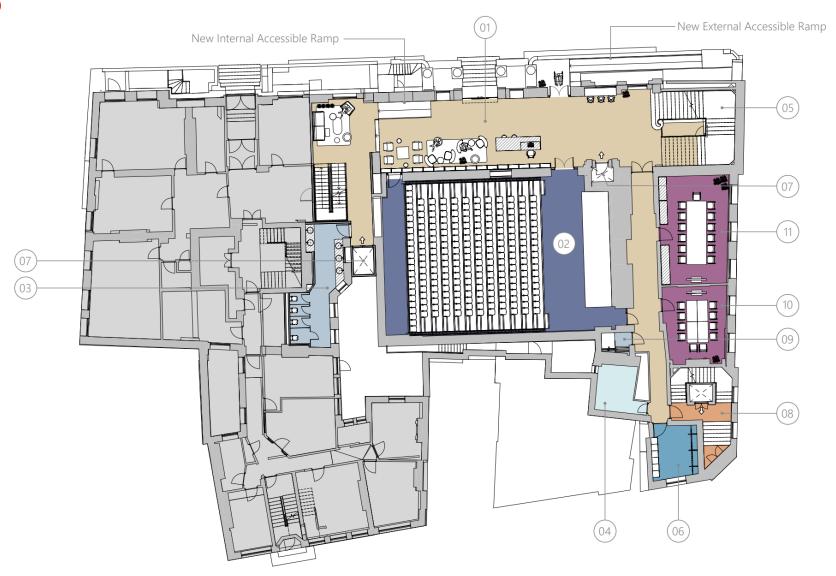
Catering Changing Area Catering Staff Area



General Arrangement

Ground Floor Level

- 01 Reception / Welcome Lounge
- 02 Lecture Theatre (retractable seating system)
- 03 Gender Neutral Toilets (Incl. Accessible Toilet)
- 04 Storage
- 05 Main Stairs
- 06 Bike Store
- 07 Lift Access
- 08 Staff Stairs / Lift
- 09 Members' Changing Room
- 10 Joseph Whitmore Meeting Room
- 11 George Stephenson Meeting Room
- Members/ Visitors Circulation
- Staff Circulation (access controlled)
- Meeting Space
- Catering
 - Members Learning & Development
- Open Workplace
 - Enclosed Workplace
- Roof garden
- Storage / Support
- Facilities (Toilets, Changing Rooms, etc.)
- Wellness (Bike Store, Relaxation Room, etc.)
- Archive
- New Lease 3 Birdcage Walk





General Arrangement Level 01

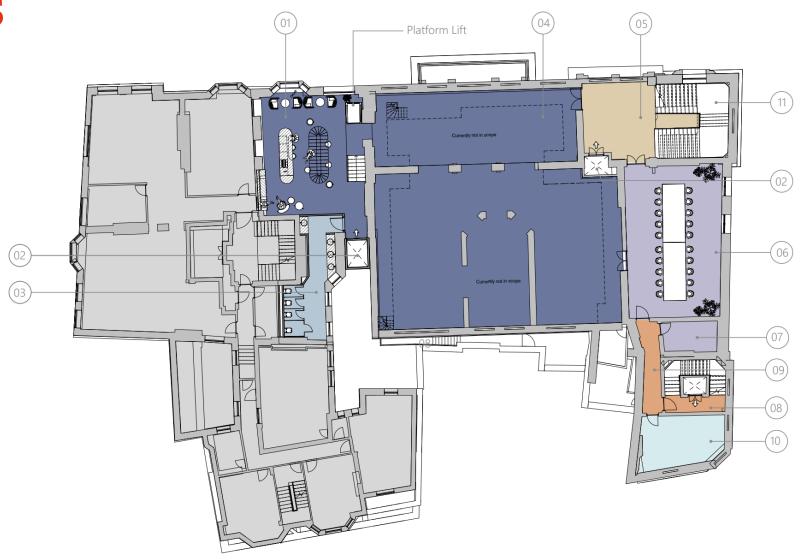
- 11 Manufacturing Room
- 02 Theatre Mezzanine
- 03 Lobby
- 04 Storage
- 05 Meeting Room
- 06 Gender Neutral Toilets (Incl. Accessible Toilet)
- 07 Lift Access
- 08 Staff Stairs / Lift
- 09 Flexible Meeting Room
- 10 Main Stairs
 - Members/ Visitors Circulation
- Staff Circulation (access controlled)
- Meeting Space
- Catering
- Members Learning & Development
- Open Workplace
 - Enclosed Workplace
- Roof garder
- Storage / Support
- Facilities (Toilets, Changing Rooms, etc.)
- Wellness (Bike Store, Relaxation Room, etc.)
- Archive
- New Lease 3 Birdcage Walk





General Arrangement Level 02

- Members' Lounge
- 02 Lift Access
- Gender Neutral Toilets (Incl. Accessible Toilet)
- 04
- 05 Library Lobby
- 06 Council Room
- 07 Catering Support
- 08 Staff Stairs / Lift
- 09 Staff Corridor (Access Control)
- 10 Furniture Storage
- Main Stairs
- Members/ Visitors Circulation
- Staff Circulation (access controlled)
- Meeting Space
- Members Learning & Development
- Open Workplace
- **Enclosed Workplace**
- Roof garden
- Storage / Support
 - Facilities (Toilets, Changing Rooms, etc.)
- Wellness (Bike Store, Relaxation Room, etc.)
- Archive
- New Lease 3 Birdcage Walk



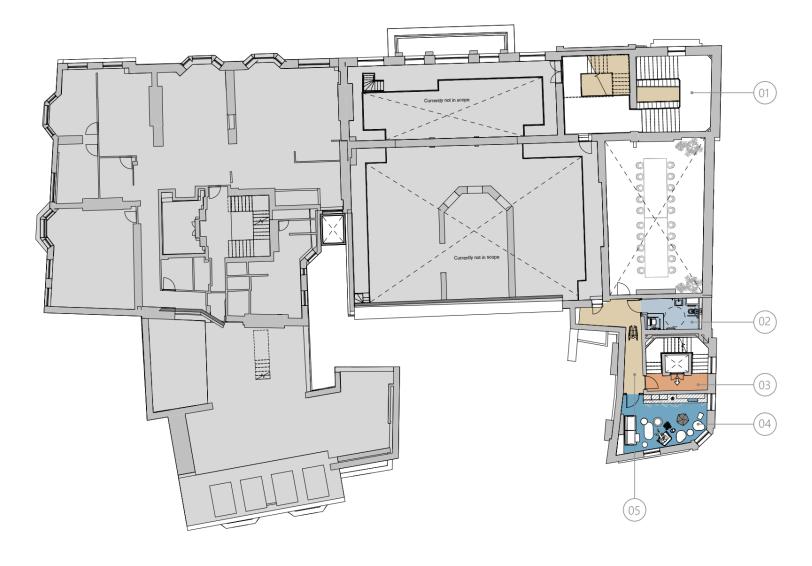


General Arrangement Level 03

- 01 Main Stairs
- 02 Accessible Toilet / Changing Room
- 03 Staff Stairs / Lift
- 04 Staff Relaxation or Quiet Prayer Room (TBD)
- 05 Staff Corridor (Access Control)

Members/ Visitors Circulation
Staff Circulation (access controlled)

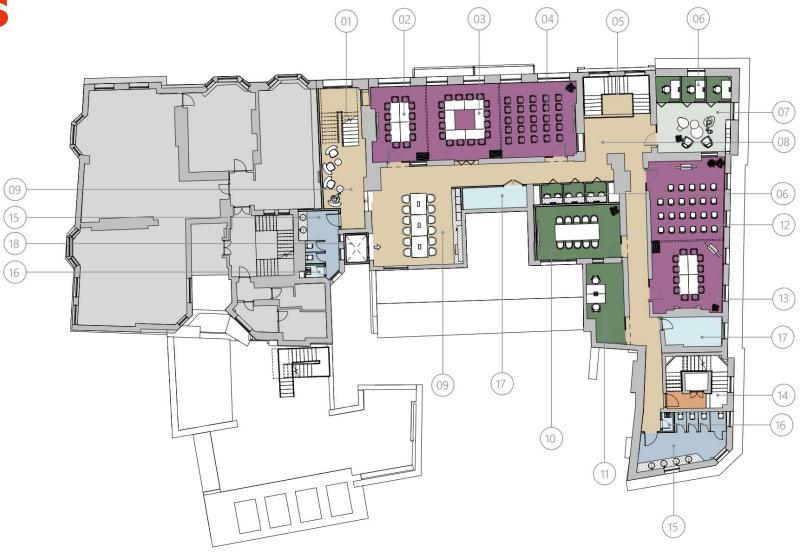
Meeting Space
Catering
Members Learning & Development
Open Workplace
Enclosed Workplace
Roof garden
Storage / Support
Facilities (Toilets, Changing Rooms, etc.)
Wellness (Bike Store, Relaxation Room, etc.)
Archive





General Arrangement Level 04

01	Workplace Stairs	12	Flexible Meeting Room
02	Flexible Meeting Room	13	Flexible Meeting Room
03	Flexible Meeting Room	14	Staff Stairs
04	Flexible Meeting Room	15	Toilets
05	Main Stairs	16	Cleaners' Room
06	Enclosed Workspaces	17	Storage
07	President and Deputies Lounge	18	Lift Access
08	Corridor		
09	Breakout		
10	Meeting Room		
11	Support Network		
	Members/ Visitors Circulation		
	Staff Circulation (access controlled)		
	Meeting Space		
	Catering		
	Members Learning & Development		
	Open Workplace		
	Enclosed Workplace		
	Roof garden		
	Storage / Support		
	Facilities (Toilets, Changing Rooms	s, etc.)	
	Wellness (Bike Store, Relaxation Room, etc.)		
	Archive		





General Arrangement Level 05

Meeting Room Stationary Room Storage Focus Room Enclosed Workspace Breakout

01	Workplace Stairs	12	Lift Access
02	Open Workplace	13	Cleaners' Room
03	Corridor	14	Toilets
04	Roof Garden Stairs		
05	Staff Stairs		

* Dedicated Meeting rooms for CEO + Directors

Members/ Visitors Circulation Staff Circulation (access controlled)

Meeting Space

Members Learning & Development

Open Workplace

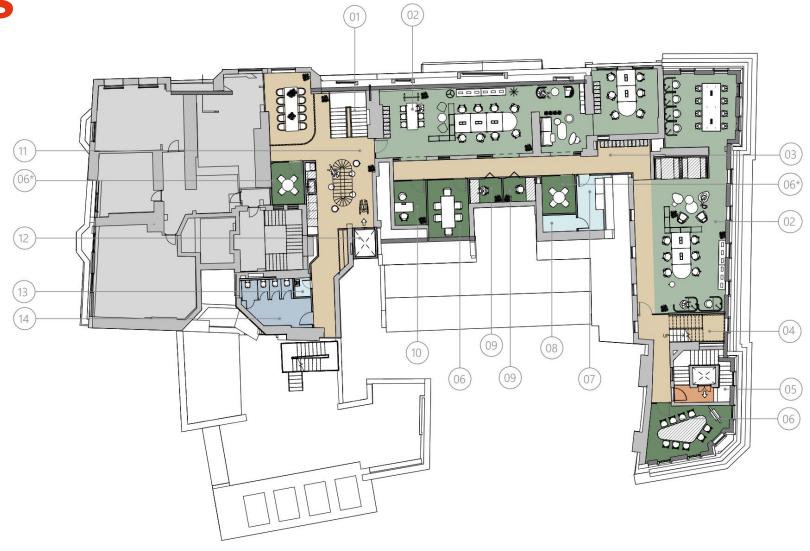
Enclosed Workplace

Roof garden

Storage / Support

Facilities (Toilets, Changing Rooms, etc.)

Wellness (Bike Store, Relaxation Room, etc.)





General Arrangement Level 06

01 Storage

02 Roof Garden

03 Roof Garden Stairs

04 Lift Access

Members/ Visitors Circulation
Staff Circulation (access controlled)
Meeting Space
Catering

Members Learning & Development

Open Workplace

Enclosed Workplace

Roof garden

Storage / Support

Facilities (Toilets, Changing Rooms, etc.)

Wellness (Bike Store, Relaxation Room, etc.)

Archive



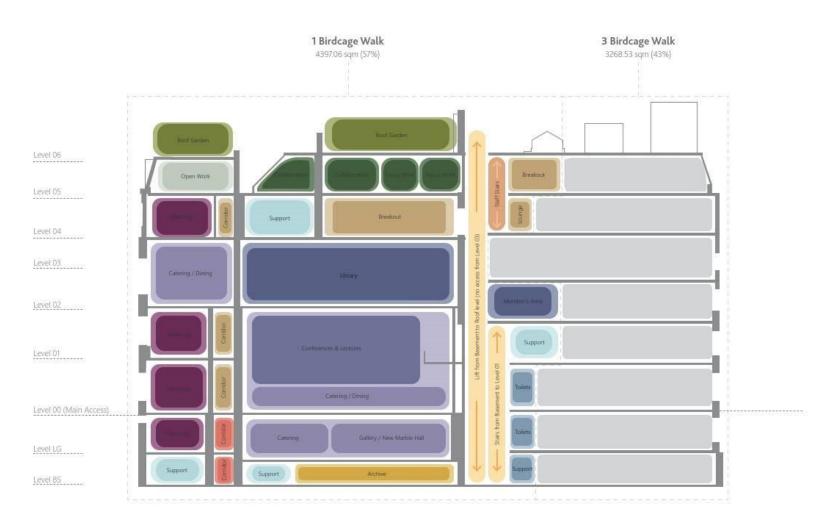


LAYOUT STRATEGY FOR 1 BIRDCAGE WALK

Spatial Design Layout Strategy

Building Stack





REAL ESTATE REVIEW



MEMBER BENEFITS



Improving the world through engineering

STRATEGIC OBJECTIVES FOR MEMBERS

- Establish a HQ for successful future Institution
- Make it work for members everywhere
- Create improved 'member priority space' and increase use of what we already have
- Create an exemplary zero carbon heritage building and target NZ by 2035 in support of LETI strategy
- Create an accessible building inclusive for those with disabilities of any kind.
- Maximise useable space
- Create flexible spaces
- Provide ITC / AV for hybrid remote / in-person meetings
- Showcase ground breaking technology and remember past engineering
- · Office space and facilities to optimise IMechE staff input.

Strategies for achieving an exemplary NZ building

Using HQ building as a showcase for new technologies

Strong staff – member contacts

STRATEGIC OBJECTIVES FOR MEMBERS

Strategies for achieving an exemplary NZ 'historic' London building – which can be an exemplar to many similar

Using HQ building as a showcase for new technologies. The building as a living lab and trial of emerging technologies. An inspiration for future engineering in construction

Strong staff – member contacts

Strong Institution – government links

Strong International leadership and links

ASHRAE HQ Atlanta is an example of what we can achieve



OBW AS A TEACHING AND LEARNING TOOL

Use our asset positively

Research tool for PhDs etc
Work with UKRI and others to
support research initiatives
Note De Montfort example of
20 + PhDs gained using
building as study vehicle.

Teaching resource for undergraduate courses
Technical visits and CPD videos

Using HQ building as a showcase for new technologies. ASHRAE HQ converted to use ground source heat pumps



USING HQ BUILDING AS A SHOWCASE FOR NEW TECHNOLOGIES

Carrington Building Reading University

Ground source heating

Low carbon building

Continued monitoring and data provided to students

Exemplar of heat pump technology



OBW AS A WORLD LEADING CONFERENCE AND WEBINAR FACILITY

- Face to face plus digital
- Install facilities that allow us to have face to face events with an audience which is also broadcast across the UK and the world so that we could have members attend elsewhere maybe at their own computer or big screen TV or maybe at another conference centre facility such as a university theatre in India, Dubai, USA, Canada, Hong Kong, your house, your pub meeting room
- on your phone/device ?????
- Stationary or on the move ????

Also in reverse too. If one of our prominent members is speaking in – say India – link to UK HQ.

Options for such events are many and varied.

Technology should be advanced but easy to use

Include a simple recording studio for a member to record a webinar session.

VIBRANT HUB TO PROMOTE MEMBER INTERACTIONS

AND IDEAS



Vibrant attractive, positive, informative spaces create interesting and productive environments

MEMBER IDEAS

- Encourage members to propose ideas
- Establish member teams
- Establish CBSD TAC for specific links to project
- Quarterly reports to Council

- Social Media push dates / countdown / emotive vs factual.
- Email comms
- Events
- Technical sessions including ideas workshops
- Link to dedicated web page

AUGMENTED REALITY RECORD OF THIS CHANGE

An embedded digital record for future access – the project, the route, the issues, decisions – the whys and wherefores and what was done.

Record meetings and discussions

Record design sessions and presentations

Record the works

Record the documents

Record commissioning

Record hand over and start up



Improving the world through engineering