



FIS

FINISHES & INTERIORS SECTOR

People-led design

Introduction

Joe Cilia, FIS Technical Director

Biophilic design and neurodiversity

Oliver Heath, Founder, Oliver Heath Design

Creating the modern office

Vidhi Sharma, Creative Director, Modus Workspace

Inspiring spaces – how we interact with our environment

Jamesina Sainsbury, Director of Consultancy, MCM



Joe Cilia

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Oliver Heath

Founder, Oliver Heath Design

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neurodiversity

BIOPHILIC DESIGN
DIVERSE SPACES FOR DIVERSE NEEDS



OLIVER HEATH
DESIGN

SUPPORTING THE WELLBEING OF PEOPLE & PLANET



OLIVER HEATH DESIGN



RESEARCH ANALYSIS & DESIGN STRATEGY

White papers

Design guides

Biophilic Design Strategy



SPATIAL DESIGN

Workplace

Hospitality

Residential

Public realm



ADVOCACY

Hosting talks & events

TV & Media presentation

Seminars and Workshops

Social media communication

OUR CLIENTS

Bloomberg

JOHN LEWIS
& PARTNERS

Westfield

BBC

AkzoNobel

Interface®

bre

 **Biotecture**

Planted

Booking.com

Unilever


SAINT-GOBAIN

Schneider
 Electric

Deutsche Bank 

 **Knight Frank**
Investment
Management

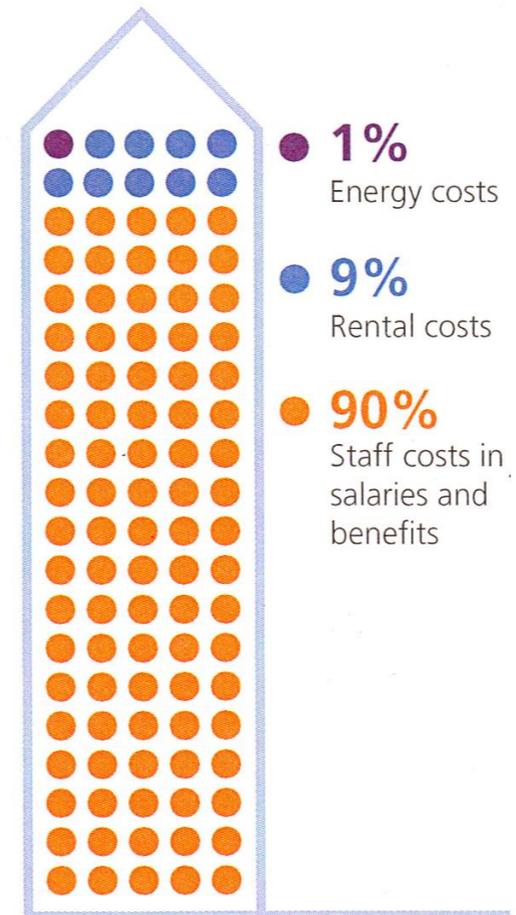
Pilbrow & Partners

REGENERATIVE HUMAN CENTRED APPROACH

Demonstrating benefits realised in:

- Overall perceived wellbeing
- Reduced absenteeism
- Reduced presenteeism
- Increased staff attraction
- Reduced staff turn over

Typical business operating costs¹



10% Variation

A 10% variation applied equally to each cost has a far from equal impact

+/- 0.1%

Energy costs

+/- 0.9%

Rental costs

+/- 9.0%

Staff costs

INTRODUCTION AND CONCEPTS: BIOPHILIC DESIGN: WHY NOW?

STRESS:

HSE study 2021/22 - stress accounts for 51% of work related ill health

18.6 days of absenteeism per person due to stress, depression & anxiety

URBANISATION:

66% of the world will be urbanised by 2050
we spend 90% of our time indoors

TECHNOLOGY:

93% of U.K. adults have smart technology
1/3 admit to checking smart phones in the middle of the night



SAVANAH THEORY – A PREFERENCE FOR NATURE

PHYSIOLOGICAL EFFECT OF BEING IN NATURE

- Pulse rates reduced by 15%
- Stress hormones reduced by 6%
- Blood pressure reduces (therefore risk of strokes)
- Reduces irritability
- Increase concentration and focus

(Park, Bum Jin et al. 2010)





BIOPHILIA

THE INNATE HUMAN ATTRACTION TO
NATURE AND NATURAL PROCESSES

“Nature holds the key to our aesthetic, intellectual,
cognitive and even spiritual satisfaction”

E.O. Wilson

THREE CORE PRINCIPLES OF BIOPHILIC DESIGN

Direct connections



In-Direct Connections



Experience of space & place



OUR SENSES

We receive 11 million pieces of sensory information every second,
across our 7 senses:

1. Visual
2. Auditory
3. Tactile
4. Olfactory
5. Gustatory
6. Vestibular
7. Proprioception



WORKPLACE DISTRACTION

WE ARE A DISTRACTED GENERATION

- 34% of employees are less satisfied working in a distracting environment
- 70% of workers say they feel distracted at work
- 50% of workers say their workplace doesn't support them
- An unread email in your inbox can reduce IQ by 10 points

- It can take 23 minutes & 15 seconds to return to a task after being distracted



INCLUSIVE SPACES SENSORY THRESHOLDS

SENSORY DIVERSITY EXISTS

15.5% of the UK population identify as being neuro diverse:
i.e. autistic, Asperger's, ADHD , dyslexia, dyspraxia, etc
However everybody exists on a spectrum of being between
Hyper-sensitive to Hypo sensitive, across the 7 senses

This varies depending on

- Time of day
- Fatigue
- Stress
- Work type and workload



Hypo sensitive

Craves sensory stimuli and is unmotivated without busy environments



Hyper sensitive

Need less sensory stimuli Are easily distracted , or overwhelmed

SPATIAL APPROACHES IN THE WORKPLACE:



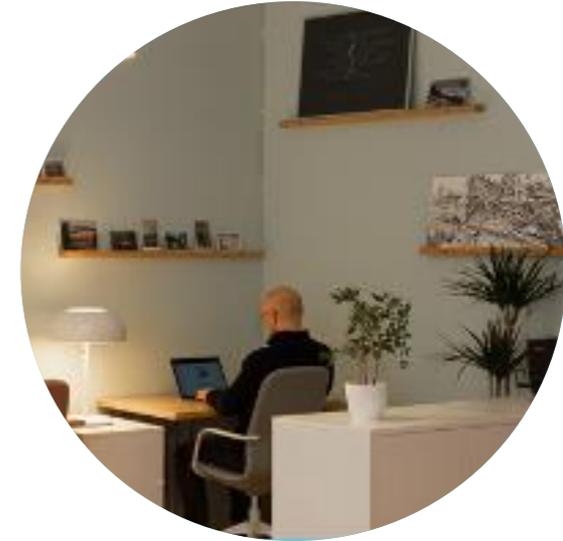
High threshold spaces

closest to the entrances and thoroughfares, offering a welcoming hubbub and lively social eating spaces.



Medium threshold spaces

where all thresholds come together for collaborative work



Low threshold spaces

furthest from walkways and entrances, exits and passing traffic

BIOPHILIC DESIGN – A UNIVERSAL ETHOS

KEY BD CONCEPTS

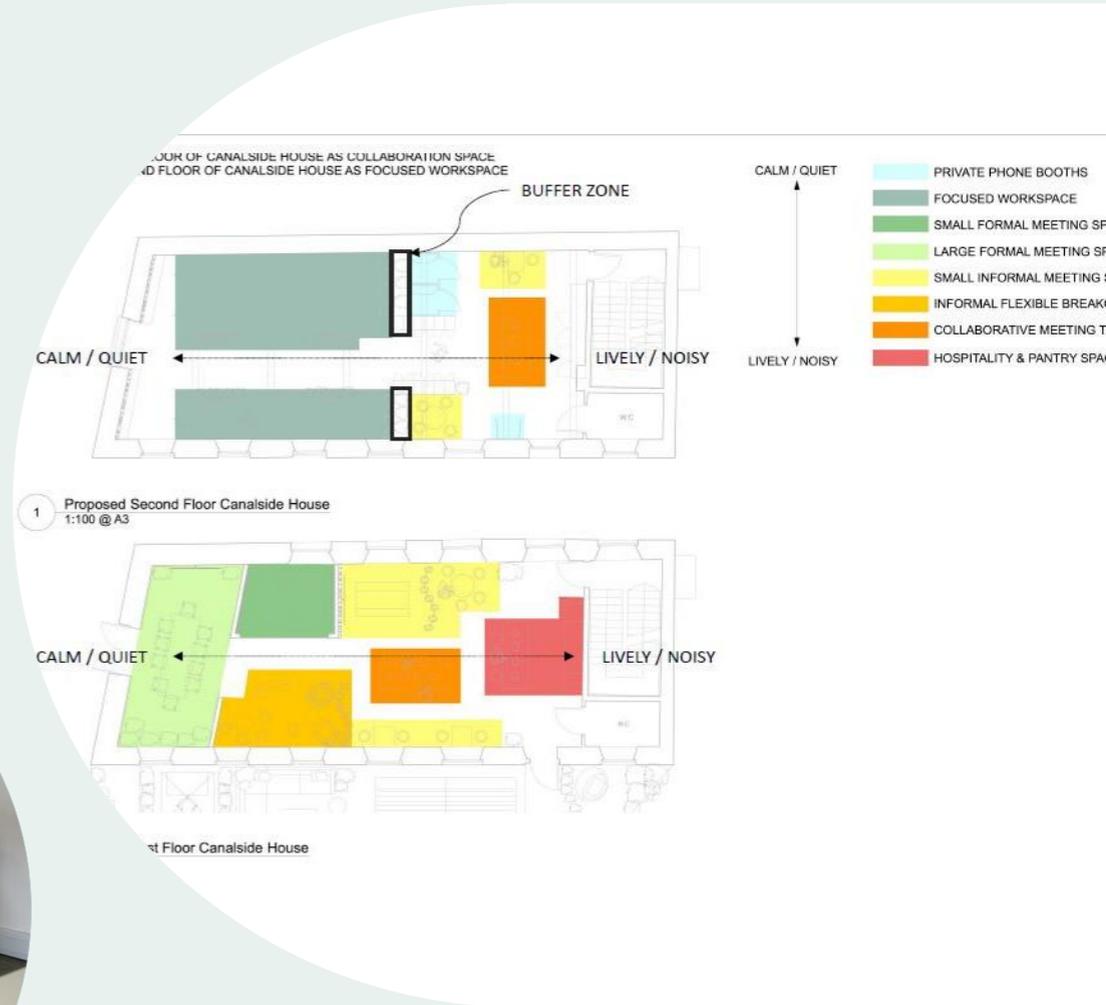
- Attention Restoration Theory
- Blue Space Theory
- Circadian Rhythms
- Non-Rhythmic Sensory Stimuli
- Prospect and Refuge
- Fractal Theory
- Ecological Valence Theory



00 CASE STUDIES

RURAL SOLUTIONS WORKPLACE

- Workplace refurbishment
- Mix of creatives and specifiers
- Lack of spatial zoning and separation
- Low post covid workplace occupation
- Distracting environments cited



05 CASE STUDIES

RURAL SOLUTIONS WORKPLACE

“The office refurb has been a huge success and has met our objective to encourage the team back into the office more regularly following the homeworking stint we had through covid.

The office offers a dynamic and inspiring space with the zoned areas to encourage collaborative working. “

Chloe Elliot

Operations manager, Rural Solutions



WIDER BENEFITS OF NATURE CONNECTIONS

BIOPHILIC DESIGN BRINGS

- Benefits to creating healthy cities
- Cultural & ecological attachment to place
- Aesthetic expression of sustainable credentials
- Enhanced building outcomes
- Reduced negative costs
- Gateway approach to valuing role of nature



BIOPHILIC DESIGN
DIVERSE SPACES FOR DIVERSE NEEDS



OLIVER HEATH
DESIGN

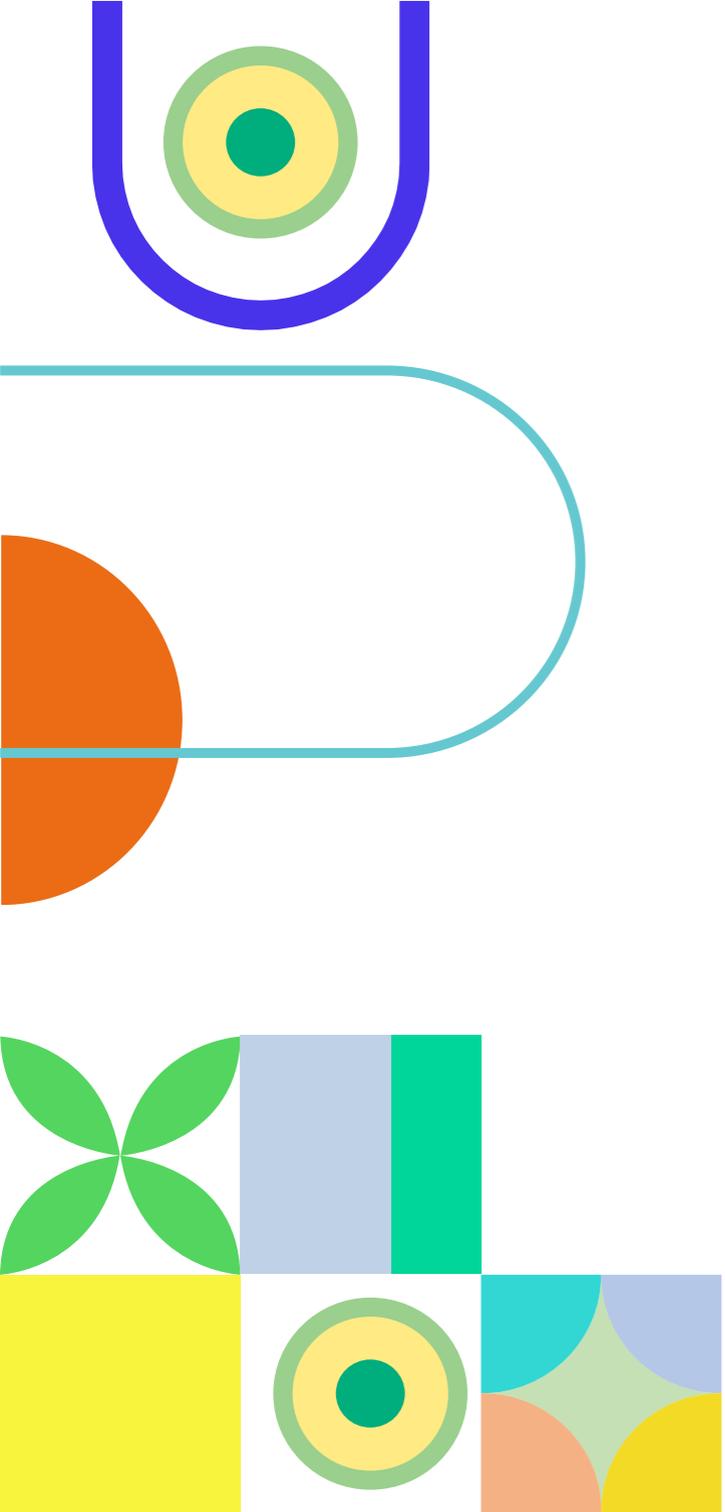
SUPPORTING THE WELLBEING OF PEOPLE & PLANET



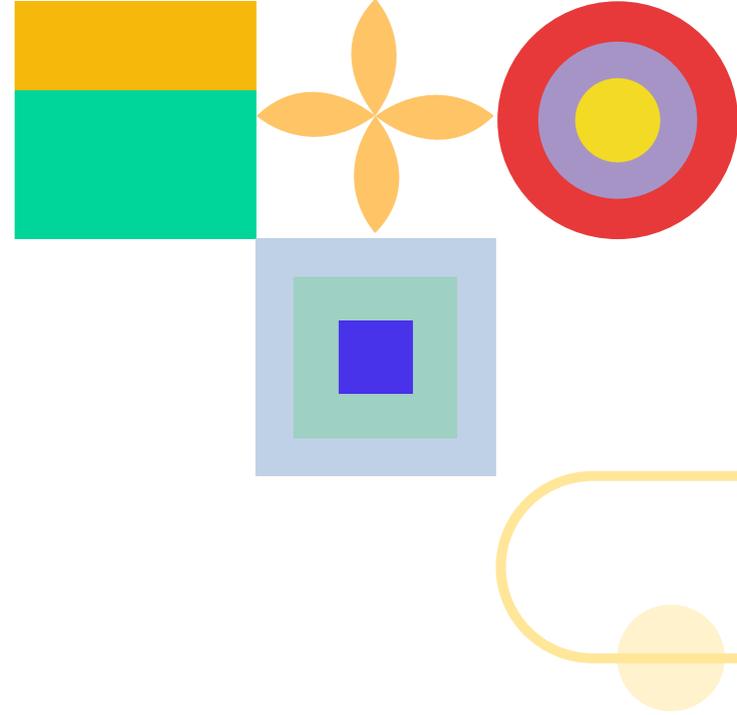


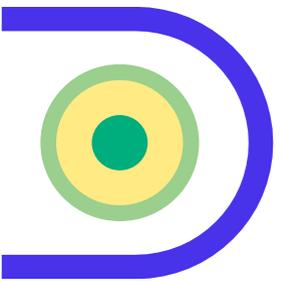
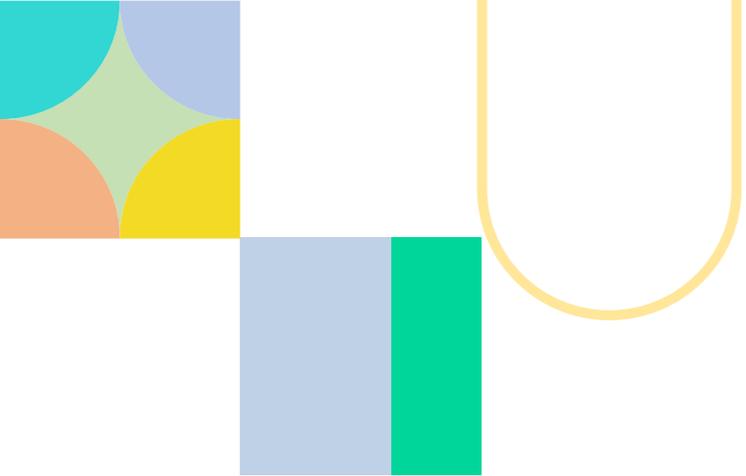
Vidhi Sharma
Creative Director,
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Creating the modern office

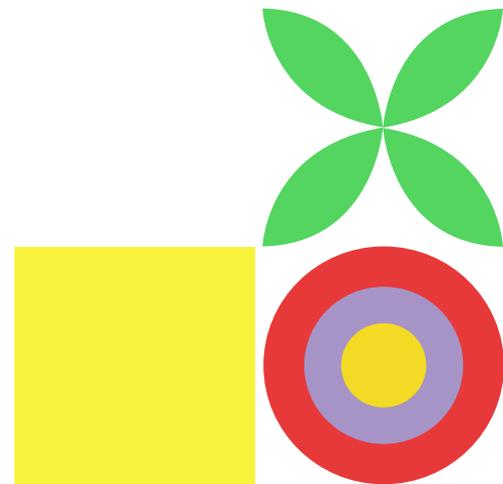


MODUS:
Neurodiversity in Design

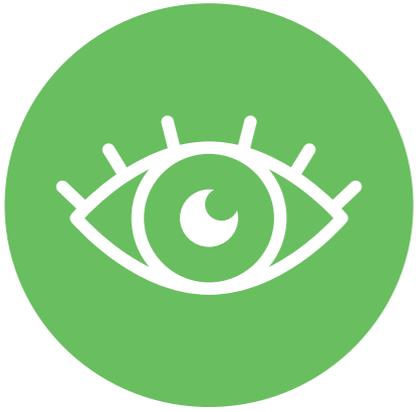




Space Plan & Zoning ✖



Sensory Thresholds



Visual



Tactile



Olfactory & Gustation
(Smell & Taste)



Auditory



Proprioceptive & Vestibular
(Body position & Balance)

HYPERSENSITIVE



- Prefer less sensory stimuli
- Organic, simple patterns
- Light, neutral colours
- Clean, orderly spaces
- Little to no background noise
- Personal space boundaries

NEUROTYPICAL

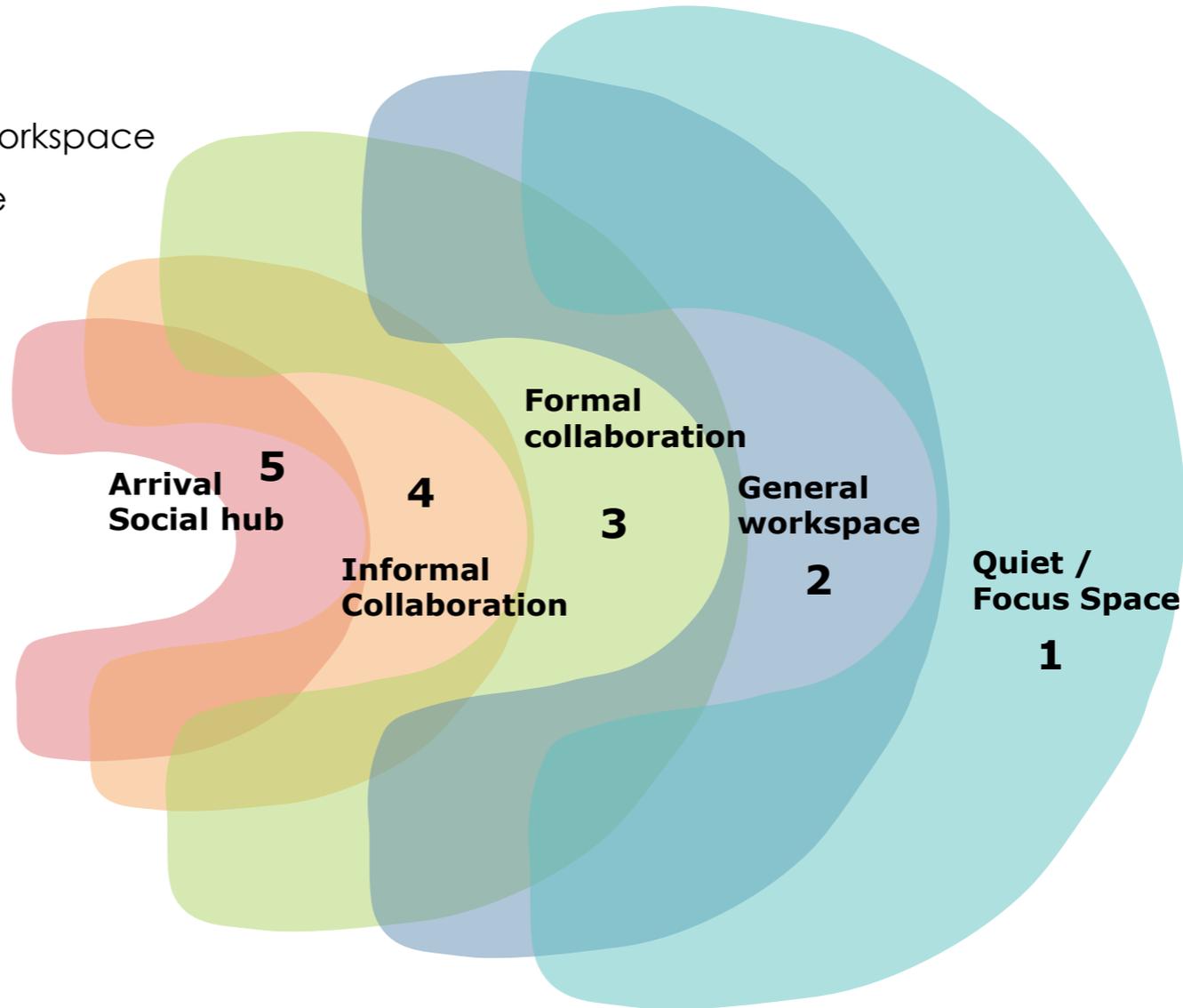
HYPOSENSITIVE



- Prefer more sensory stimuli
- Layering of textures and planes
- Saturated, contrasting colours
- Plenty of visual interest
- Background chatter and/or music
- Space to move/fidget

Zoning

-  Reception
 - Tea point
 - Breakout
 - Town hall
-  Group collaboration
 - Variety of settings
 - Project / teamwork
 - Open / permeable
-  Formal meeting rooms
 - Informal meeting rooms
-  Department/ team workspace
 - Semi quiet workspace
-  Individual space
 - High concentration
 - Focus work

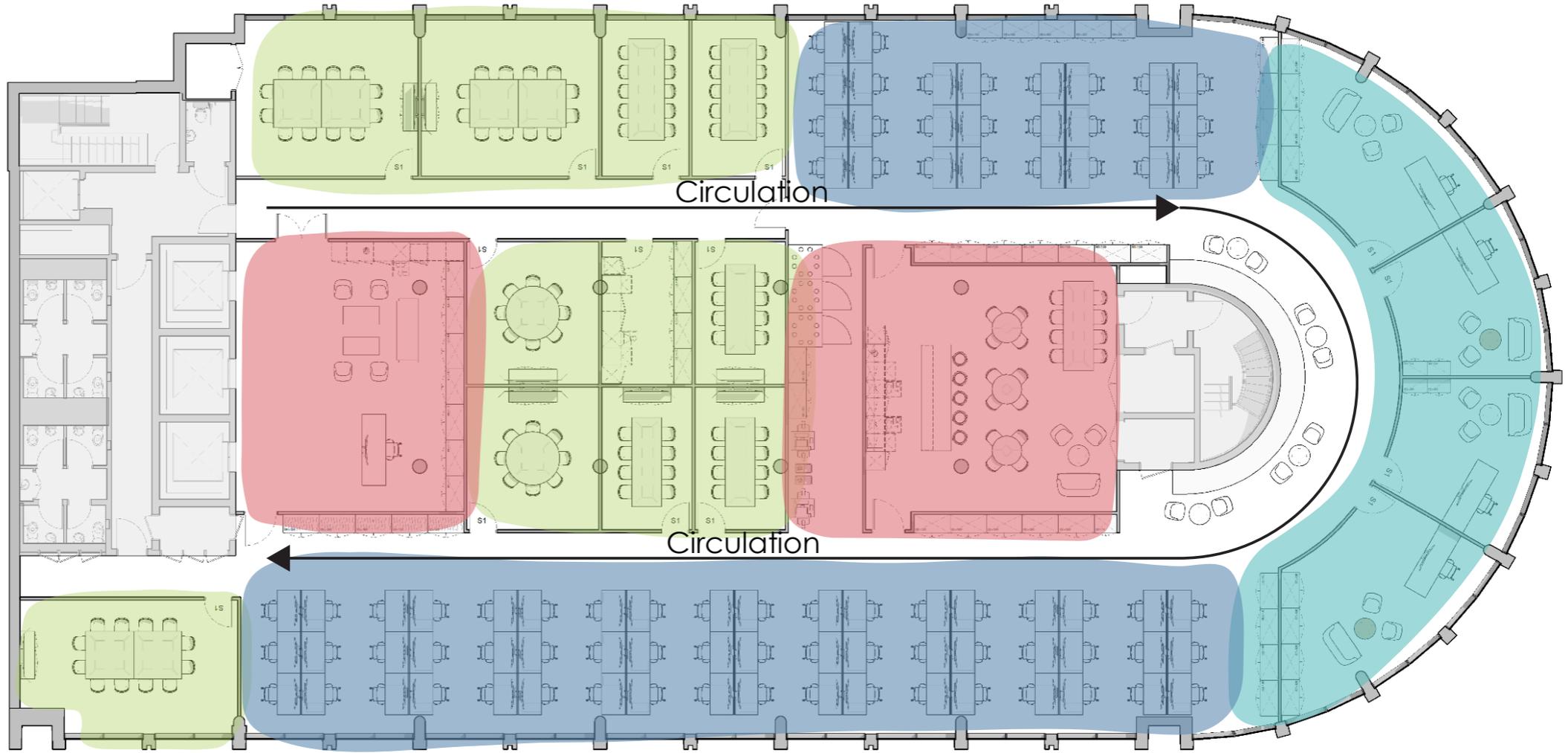


ACTIVITY

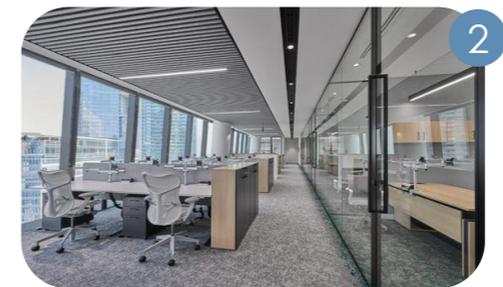
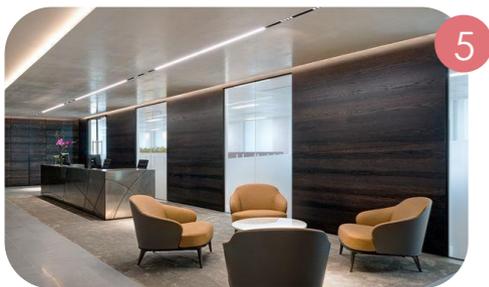
ENERGY LEVEL

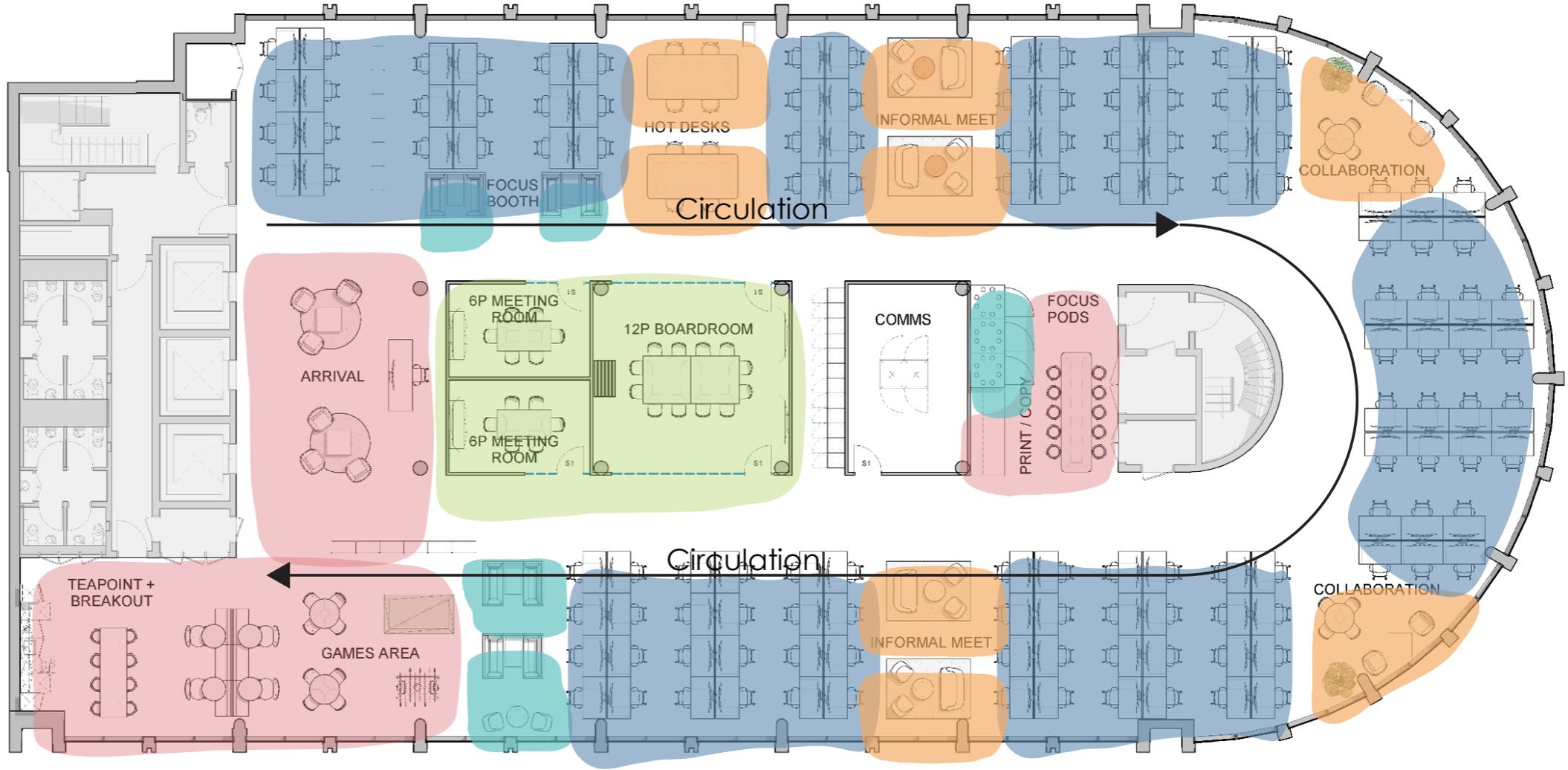
ACOUSTICS

LIGHTING

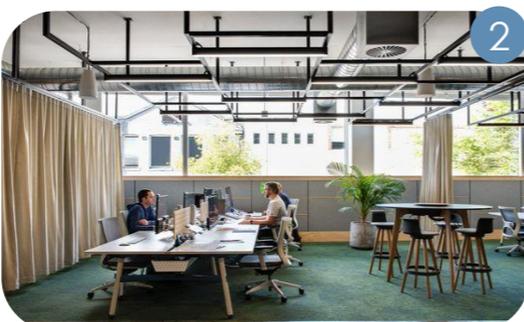


- 5** Active
- 3** Formal Collaborative
- 2** Work
- 1** Quiet Focus





- 5 Active
- 4 Informal Collaborative
- 3 Formal Collaborative
- 2 Work
- 1 Quiet Focus



2020

HYPERSENSITIVE

Convivial / Social

Collaborate

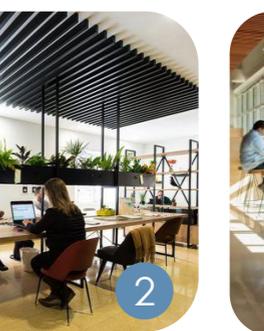
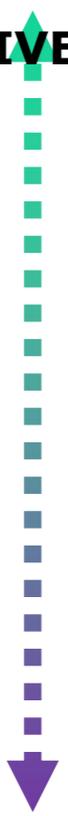
Congregate

Create / Process

Contemplate

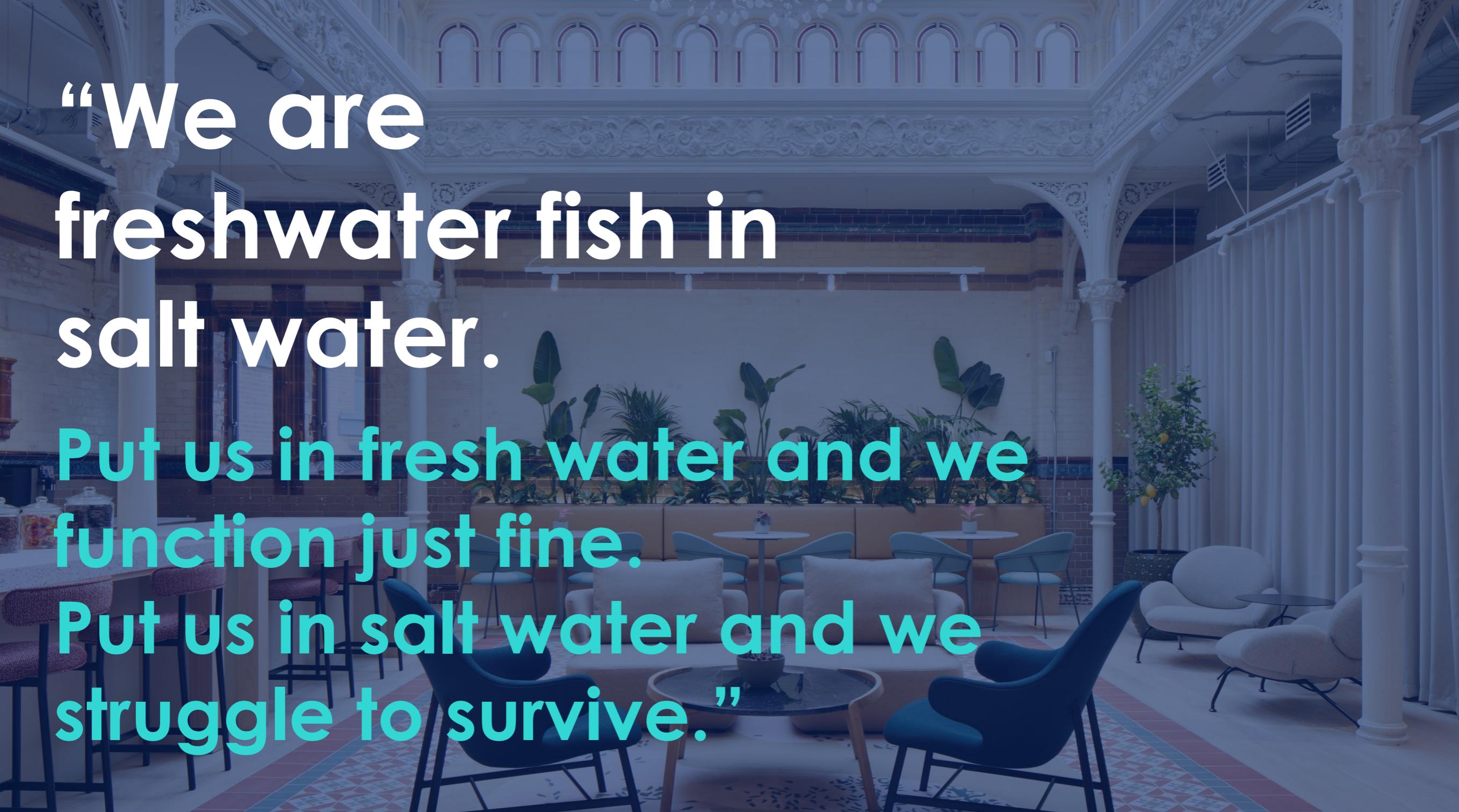
Concentrate

HYPOSENSITIVE



- 5 Active
- 4 Informal Collaborative
- 3 Formal Collaborative
- 2 Work
- 1 Quiet Focus

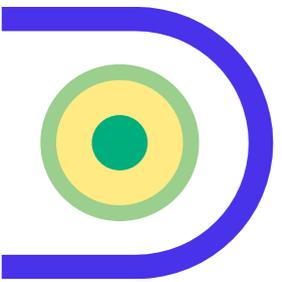
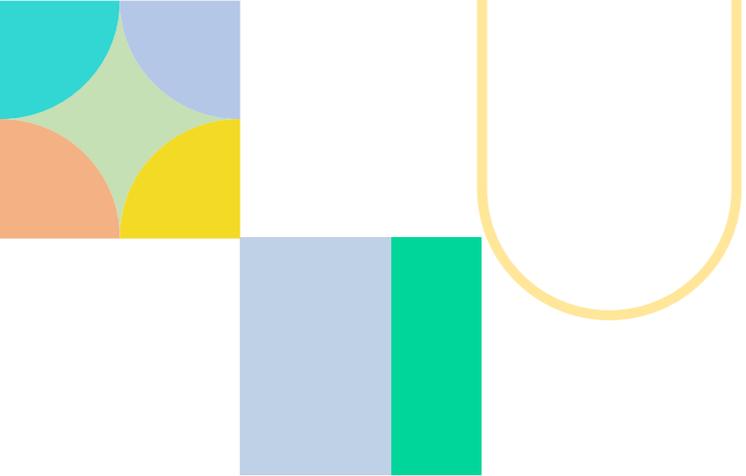




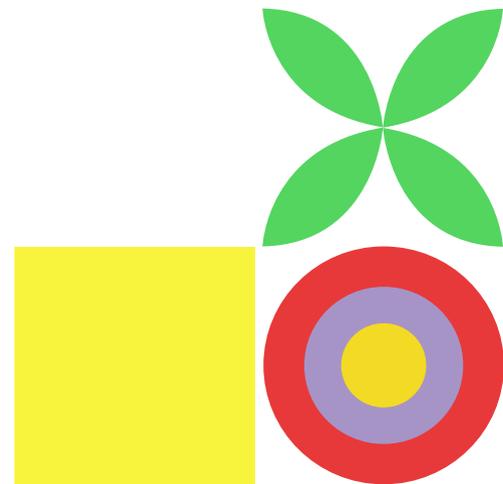
**“We are
freshwater fish in
salt water.**

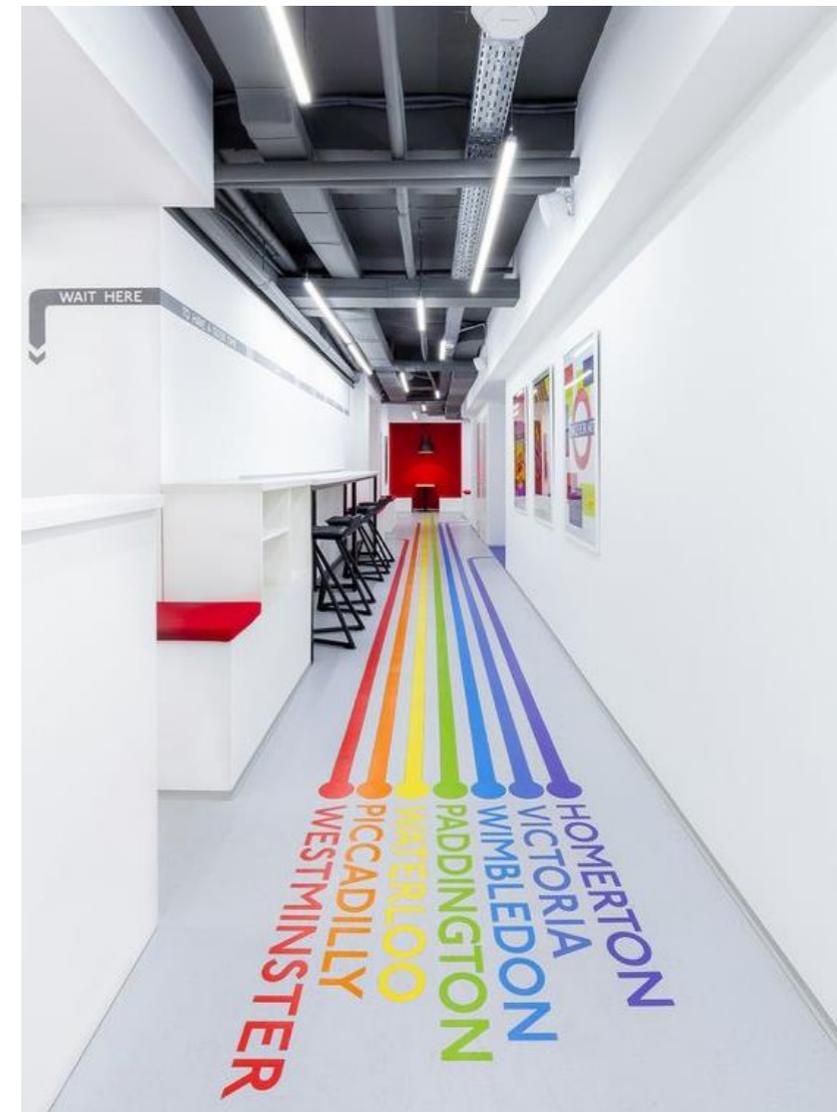
**Put us in fresh water and we
function just fine.**

**Put us in salt water and we
struggle to survive.”**



Wayfinding ✨





Wayfinding

- Plenty of visual interest
- Use of text and imagery
- Saturated colours
- High contrast





Wayfinding

- Use of architectural details
- Strategic use of colour
- Clear lines of sight / viewpoints
- Intuitive navigation





**“We are no
longer designing
environments.**

**We are designing the
experience.”**



Jamesina Sainsbury

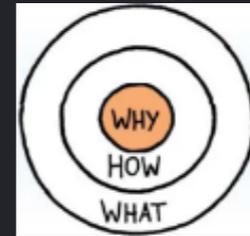
Director of Consultancy, MCM

Inspiring spaces – how we
interact with our environment



Creating
Human
Workspaces.

MCM.



Jamesina Sainsbury.

MCM.

What we do.



ARCHITECTURE

INTERIORS

CONSULTING

BEHAVIOURAL CHANGE

MCM.



Designing a
future people
love.

MCM.

Love = Human

MCM.

Being Human.

MCM.



MCM.

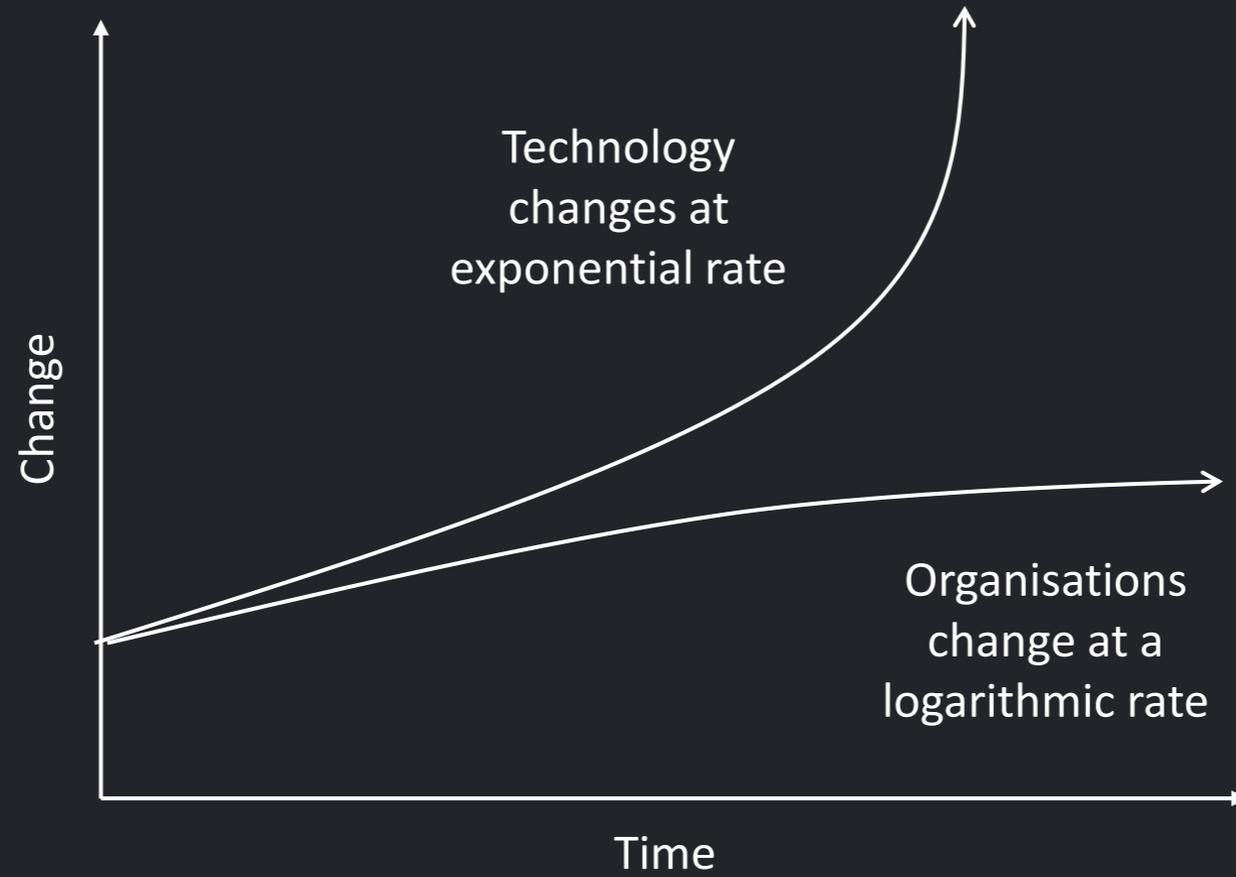


MCM.

The world of work.

MCM.

Change





OLD WORK
= Structured, Repeatable,
Predictable
= Automated

MCM.

NEW WORK

= Design, Imagination, Inspiration,
Creativity, Empathy, Collaboration,
Social Intelligence

MCM.

HUMAN WORK

= Design, Imagination, Inspiration,
Creativity, Empathy, Collaboration,
Social Intelligence

MCM.

The success of an organisation
depends on its ability to enable
human flourishing.

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Panel Debate

Client Guide to Fit Out



FINISHES & INTERIORS SECTOR

CLIENT GUIDE OFFICE FIT-OUT AND REFURBISHMENT



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Client Guide to Fit Out



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CLIENT GUIDE OFFICE FIT-OUT AND REFURBISHMENT



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CARRY OUT A FEASIBILITY STUDY

7

At this stage consider if you need a feasibility study. Not every fit-out will, but identifying problems early can save a fortune later. A thorough examination of the potential opportunities and pitfalls of your fit-out options might save money by helping you avoid making the wrong choices.

You might, for example, find that the office you want would be significantly more expensive in one building than another, or that planning permission would likely be refused. It might also help identify which elements are 'must have' and which are 'nice to have' and give you an accurate basis for setting a budget.



MAKE A DECISION

8

"This could range from doing nothing, staying where you are with no change other than a lick of paint, to a full fit-out."

It's decision time. You should now have enough information to make a decision about if, or how, you are going to progress. This could range from doing nothing, staying where you are with no change other than a lick of paint and perhaps some new chairs, to moving to a swanky new office with the latest environmental standards using BIM and Soft Landings.

You will also decide, if you have not already done so, whether to go down the traditional route or use a D&B contractor and whether to retain any elements outside the main contract.

Client Guide to Fit Out



FINISHES & INTERIORS SECTOR

CLIENT GUIDE OFFICE FIT-OUT AND REFURBISHMENT



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CASE STUDY

Client: CABE (Chartered Association of Building Engineers)

Contractor: Steele & Bray
Architect: Stagg Architects

Structural engineer: DSA



Identify need

After over 40 years in their original purpose-built HQ without major modernisation, CABE decided to fully refurbish their premises whilst retaining the building as a whole in order to better reflect the reputation of this otherwise modernised and prestigious chartered association.

Project brief

The main practical concerns in the brief were to significantly improve the thermal performance of the building, to ensure full compliance with Document M and to facilitate future integration of renewable technologies in line with carbon neutral targets, all whilst working to ensure existing materials such as ceilings, doors and woodwork were re-used to the fullest extent possible in line with CABE's current commitment to sustainability.

Research

Significant technical analysis of the existing building was undertaken, including software analysis of heat losses and gains testing various solutions to assess the impact they would have in terms of energy use and carbon reduction.

Analysis showed that the biggest improvement to energy efficiency would be made by a combination of replacing all the windows and providing better insulation at ceiling level which allowed for authorship of a more precise brief.

Procurement

Outside of the savings considered by the re-use aims, as a not-for-profit organisation deriving income from membership fees and training courses, CABE had to spend resources openly and transparently in a manner that is consistent with their own code of conduct.

Making appointments

Several architects and contractors were invited to an interview at the existing HQ. These visits proved to be beneficial for all parties allowing not just for clarifications, but helping visualise the project and discover more about our drivers before tendering for a shortlist which identified those that met the brief in the most appropriate way. Information about other relevant projects that they had worked on, competency, sustainability and financial stability, as

well as the project budget and timeline were all considered. CABE then held final interviews and presentations with the senior executive team before making the final appointments.

Delivery

The project was delivered just one week late on a 22-week programme, which is pretty good, considering it ran over winter and during a national lockdown as a result of the Coronavirus pandemic. In addition, the site remained Covid-19-free throughout. CABE worked closely with the main contractor to ensure health and safety was prioritised, resulting in no reported accidents during the works. The original contract sum increased by just 2.6%, well below a typical 5% to 10% contingency for works to an existing building, and the project was completed to a very high quality.

The refurbishment is a great example of how the cost-quality-time paradox can be defied while still pursuing a highly sustainable agenda, and says much about CABE's values and aims in relation to the wider construction industry and the challenges it faces.

Your panel can be contacted at



- studio@oliverheathdesign.com
- jamesina.sainsbury@mcm-uk.com



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We'll be right back