# **PORTFOLIO**

#### LLOYD HELEN

This portfolio describes the projects that I have worked on in areas of architecture and urbanism throughout my academic studies and professional career.

Unless otherwise noted, all work is my own.

# Professional Work

1

#### **Euston CSC**

London, UK

Construction Skills Centre and shared workspace. First prize.

2

#### **Heathrow Hotel**

London, UK

300+ bedroom hotel next to London's major airport.

3

#### **IBM Hub**

Winchester, UK

A place of collaboration and recreation for IBM staff.

4

#### **East Harlem**

New York, NY, USA

Redevelopment proposal with NYC Dept. of City Planning.

5

#### Envelope

New York, NY, USA

Zoning analysis, beta testing and illustration.

# 6

#### L Train Shutdown

New York, NY, USA

Positing the L train shutdown as a unique opportunity.

# 7

#### **Engine Company 23**

New York, NY, USA

Interior and exterior renovation of an historic firehouse.

## 8

# Martha's Vineyard

Chilimark, MA, USA

Ground-up residence on 29 acres of ocean-front property.

# 9

#### **International House**

New York, NY, USA

Multi-year phased renovation of student residences.

#### 10

#### 159 Madison Ave.

New York, NY, USA

Renovation of high-end mid-Manhattan apartment.

# 11

### **LSE and Kingston**

London, UK

Two competitions. First prize for Kingston University.

#### 12

#### **Spenner HQ**

Erwitte, Germany

New headquarters for cement manufacturer. First Prize.

# 13

# Xujiahui Promenade

Shanghai, China

Elevated pedestrian connector and promenade.

# Academic Work

#### 1

# The Architecture of Curiosity

Glasgow, Scotland, UK

Thesis project in the post-industrial city.

#### 2

#### Adaptable Infill

Copenhagen, Denmark

'Building as stairs' infill development proposal.

# 3

#### **Acrylic Tendancies**

Copenhagen, Denmark

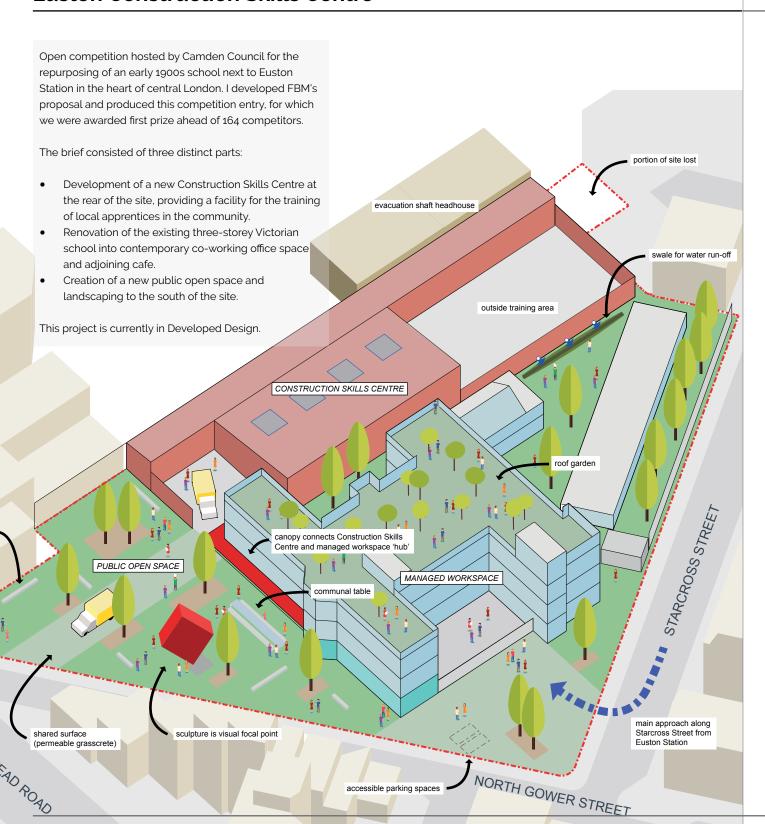
Investigating the properties of plastic as a building material.

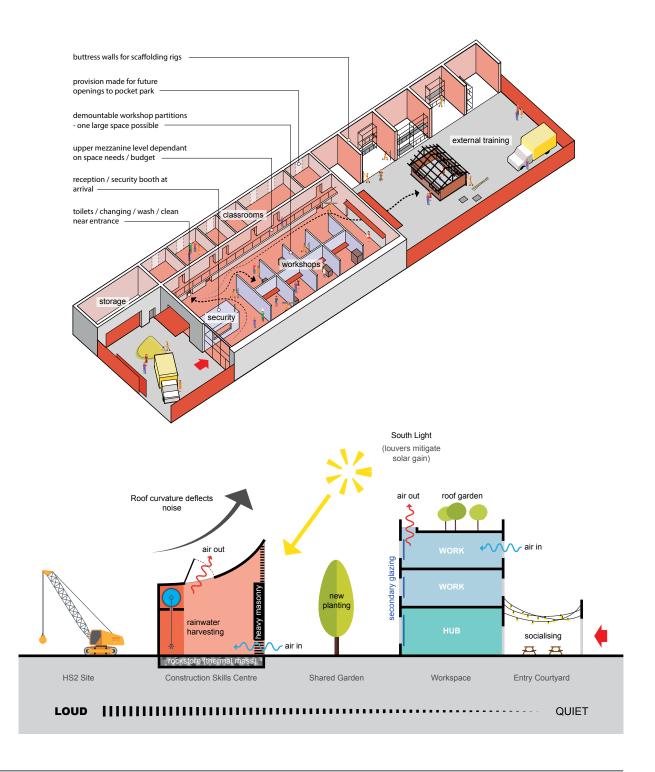
# **Euston Construction Skills Centre**

FBM ARCHITECTS

LONDON, UK

Spring 2018 - present





Architectural Designer / Project Leader

ROLE

approach from Hampstead Rd.

CLIENT

London Borough of Camden

Heathrow Hotel

FBM ARCHITECTS

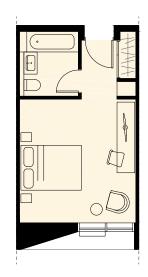
London, UK
Fall 2017 - present

Design of a new 326 bedroom, 4 star hotel next to Heathrow Airport in London. Under the guidance of the Office Principal, I currently lead this project, which was recently submitted for full planning approval.

#### Primary Responsibilities:

- Researching best practice in hotel design and developing a layout that matched to the client's expectations.
- Overseeing junior team members and coordinating with external consultants (planning, MEP, structure, acoustic).
- Production of architectural documents for planning submission and liaising with Planning Officers via in-person meetings and written correspondence in order to achieve planning approval.
- Advising the client in their discussions with hotel operators.

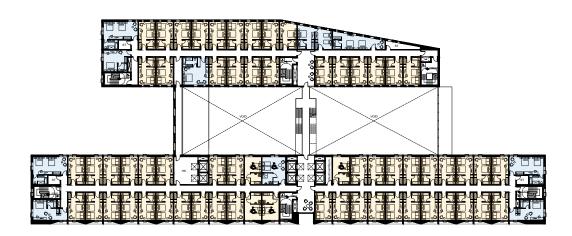
This project is currently in Developed Design.



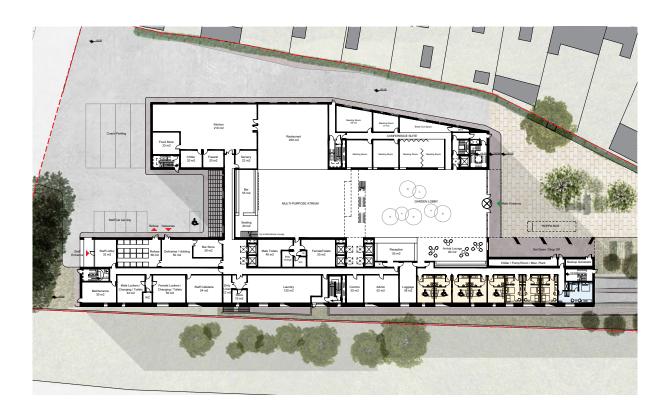
- ↑ TYPICAL BEDROOM LAYOUT
- ↓ VIEW FROM MOTORWAY

  (RENDERING BY KUWICKI STUDIO)





- ↑ TYPICAL UPPER FLOOR PLAN
- ↓ GROUND FLOOR PLAN



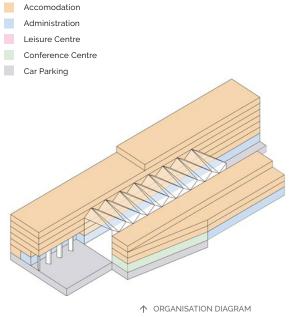
**CLIENT** Elite Group

Heathrow Hotel FBM ARHICTECTS

The hotel is organised as two blocks of accommodation with a central atrium space between. The constraints of the site geometry and the proximity to neighbouring residential properties dictates that the larger volume faces the busy motorway to the east, with the smaller block to the west.

The generous light-filled atrium is the main public space off of which the primary hotel facilities are located - restaurant, bar, conference suite, and leisure centre. The vertical core is located in the centre of the larger block, with bridge links providing access to the smaller accomdodation wing. This mitigates the need for a second primary core and animates the central space by moving people horizontally across it.

The external treatment of the facade attempts to create something of heft and significance in an area dominated by bland hotel exteriors. The chosen brick material is in keeping with the surrounding residential context.



↓ VIEW FROM ARRIVAL COURT

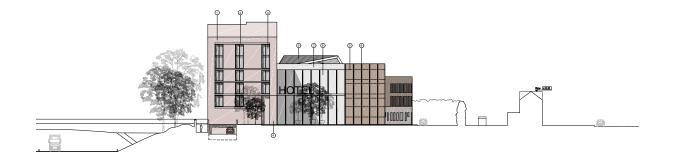
(RENDERING BY KUWICKI STUDIO)











**CLIENT** Elite Group

IBM Hub

FBM ARCHITECTS

Winchester, UK
2017

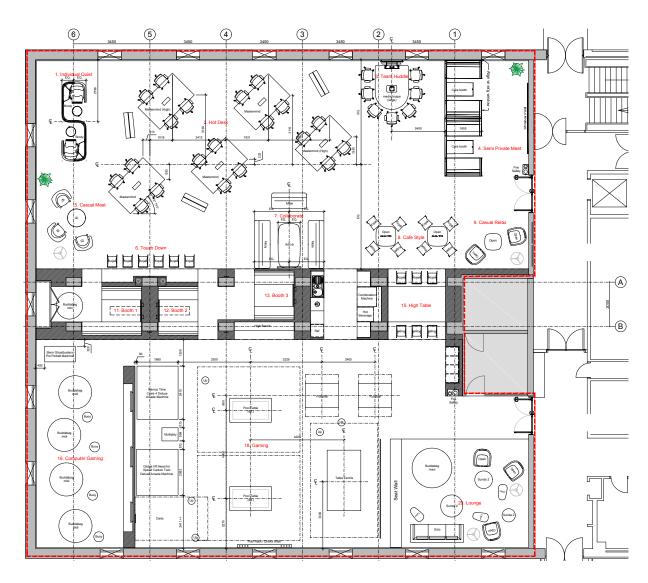
Full interior renovation of 5000 sq.ft. redundant office space at IBM Hurlsey, IBM's research and development campus in southern England. I led this project from schematic design through to handover and close out.

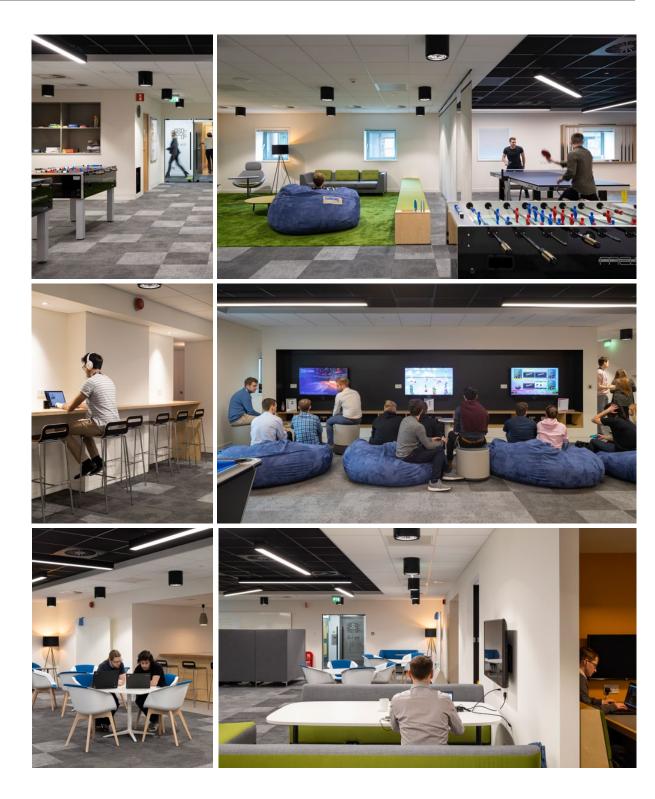
#### Primary Responsibilities:

- Architectural coordination with client and consultant teams.
- Internal budgeting, scheduling and project management.
- Production of bid documents and assisting in selection of contractor.
- Procurement of all furniture items in line with project schedule.
- Site inspections and resolving of issues that arose on site.



- ↑ EXISTING CONDITION
- ↓ AS-BUILT GA PLAN





# **East Harlem Development Plan**

NYC DEPARTMENT OF CITY PLANNING

Assisting in the development of city planning policy, zoning review of large-scale urban developments, neighbourhood analyses and site-specific urban design studies.

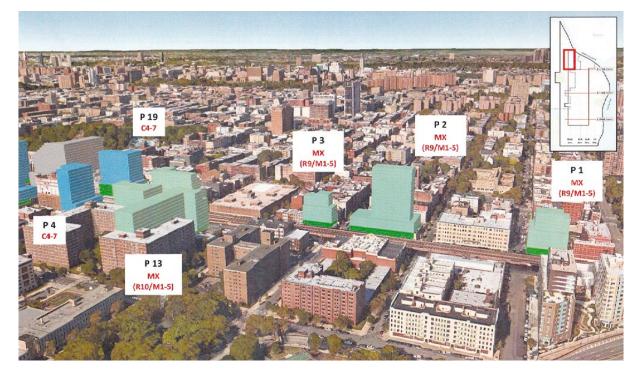
Working out of the Manhattan Office, I worked on the current re-zoning of the East Harlem neighbourhood in Upper Manhattan, with the aim of providing more development opportunities, particularly for affordable housing. This was tied to Mayor Bill de Blasio's key ten year plan for an Affordable New York

#### Primary Responsibilities:

- Zoning analysis and 3D massing visualisations
- 'Soft site' analysis utilising GIS data and Excel
- Illustrative mapping
- Powerpoint presentations

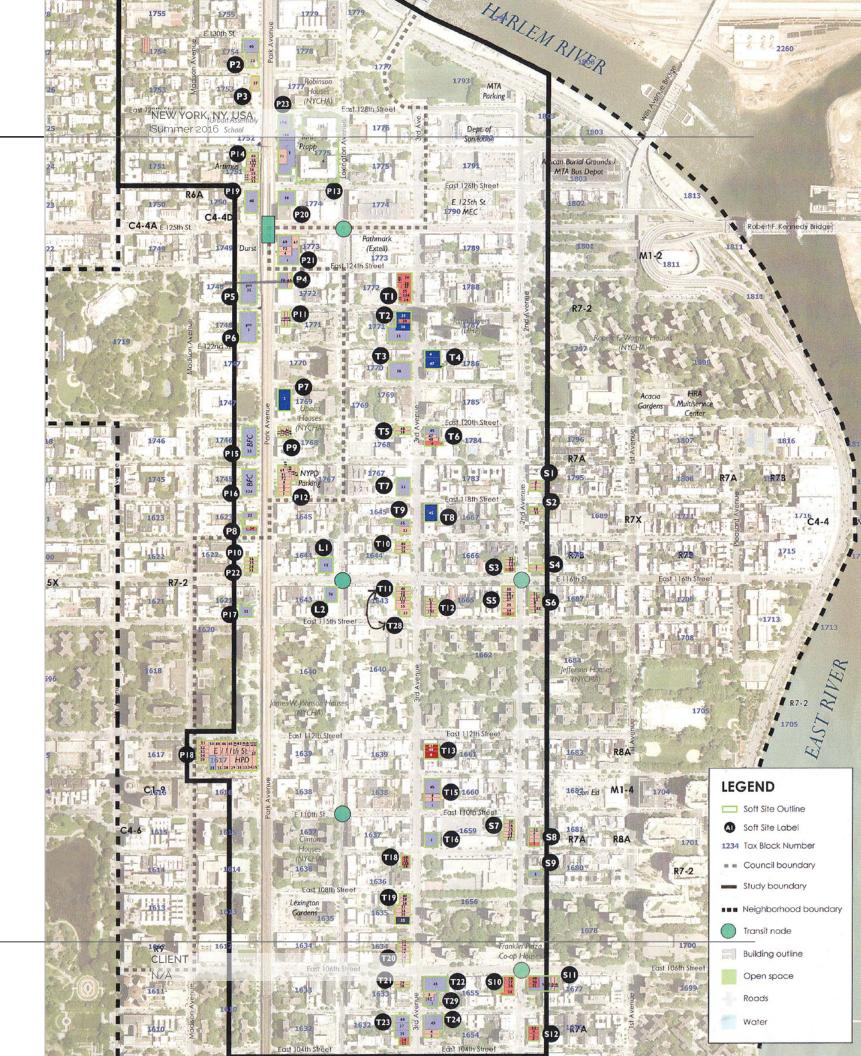


- 7 PRELIMINARY EAST HARLEM ZONING FRAMEWORK
- → 'SOFT SITE' ANALYSIS
- igspace PROPOSED MASSING SCENARIOS AT 125TH STREET STATION



#### ROLE

Urban Design | Planning Assistant



# **Zoning Analysis & Illustration**

ENVELOPE

NEW YORK, NY, USA Fall 2016

Envelope is a software company, spun out of a longtime collaboration between award-winning SHoP Architects and the Director of MIT's Civic Data Design Lab. The primary product enables instant, dynamic 3D visualisation of the development potential of all zoning lots in NYC.

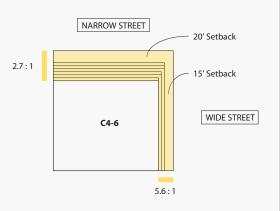
Utilizing my experience at the NYC Department of City Planning and my familiarity with NYC zoning laws, I worked with the team to conduct quality analysis in the lead up to the beta release of their first product. I also translated relevant aspects of complicated zoning text into legible diagrams, to be used as an internal resource for a software team unfamiliar with standard zoning concepts.

#### Primary Responsibilities:

- Collating list of test sites from open source data (PLUTO)
- Quality Analysis of test sites against zoning codes and frameworks.
- Illustration of zoning laws for in-house manual.

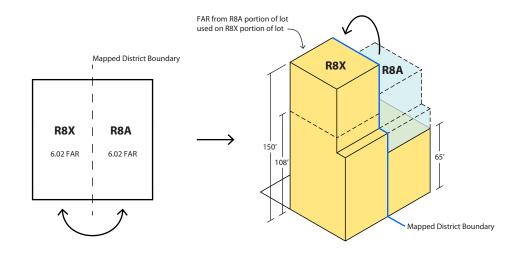
I continue to work with Envelope on a freelance consultancy basis.

# SETBACKS



# SKY EXPOSURE PLANE Sky exposure plane pla

#### FLOOR AREA RATIO (FAR) TRANSFER



#### **ADJUSTED SKY EXPOSURE PLANE**

#### 3.9:1 (Adjusted) Sky Mapped District Boundary Standard max. lot coverage beyond corner (70% for R8X) 20' Setback on Standard max. lot - coverage (65% for R6A) 100% coverage allowed at corner (excluded from (5,000 SF) lot coverage calculations) 15' Setback on Narrow R8X R6A Wide (10,000 SF) 7,500 SF Dividing line between Wide and Narrow streets Sky Exposure Plane 5.6:1 (wide) 2.7:1 (narrow) Max. Lot Coverage 70% 65% (5.6 x 5000) + (2.7 x 7500) (70 x 5000) + (65 x 7500) (5000 + 7500) (5000 + 7500) Adjusted Sky Exposure Plane 3.86:1 Adjusted Max. Lot Coverage 67%

**LOT COVERAGE @ CORNER** 

FAR allowed to move freely around zoning lot

ROLE

Zoning Analyst / Illustrator

CLIENT

N/A

NEW YORK, NY, USA Summer 2016

NC



MEANS MORE













The situation demands that alternatives of ferry, bicycle, and bus rapid transit. A new express ferry service could ship commuters directly across the water from Williamsburg to midtown, bypassing current stops further north in Queens. 14th Street could be closed to traffic, with dedicated bus and bicycle lanes. Express ferries could link up with the existing terminal at 34th Street, and the M34-SBS.

Finally, there is an opportunity to redefine the area around the Beford Avenue L stop, the heart of an ever-growing Williamsburg neighborhood.

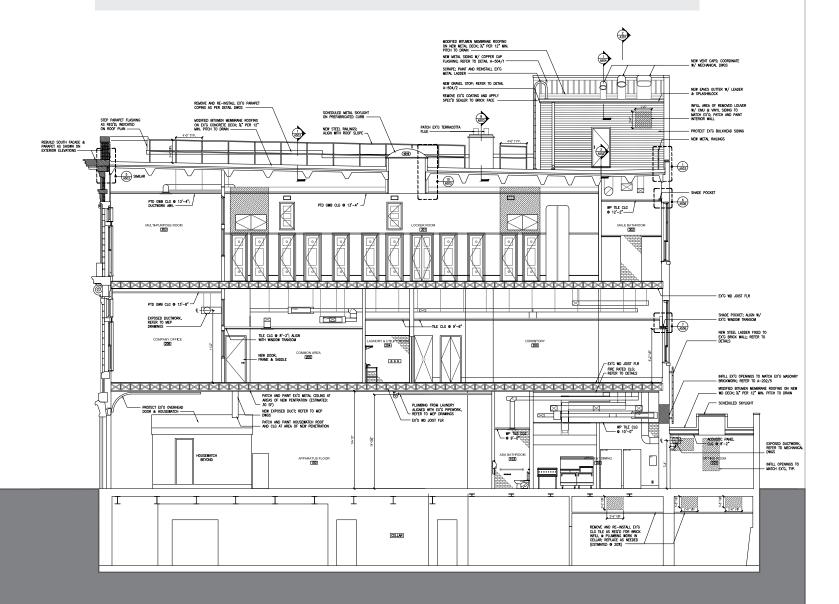
#### PROPOSAL

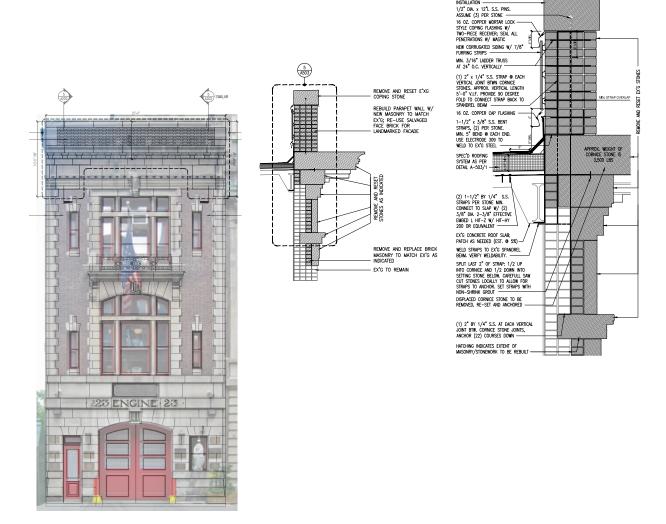
ONWARD: Mobility in the Next New York

Interior and exterior renovation of Engine Company 23, a Landmark, Beaux-Arts fire house in midtown Manhattan. The program includes new kitchen, dining, lounge, and living quarters as well as restoration of the historic masonry facade.

#### Primary Responsibilities:

- Design development and project management from SD to CD (project lead).
- Production / preparation of biddable design documents leading to contract award. Preliminary CA.
- Coordination with client agencies, MEP engineers, and specialist sub-consultants.
- Leading DDC / FDNY client meetings; Preparing agendas and meeting minutes.
- NYC DOB Building Code / Zoning Resolution research to achieve regulatory approvals. LPC filing.





A new house on twenty-nine acres of ocean-front property in Chilmark. The wood and glass structure will be low and modestly scaled to sit gently on the terrain. It consists of a 1,450 sf one-bedroom residence attached by a breezeway to a 950 sf spa with indoor lap pool. The project is designed to Passive House standards for optimal sustainability. Automated shutters of perforated stainless steel provide shading to the 120-foot-long south-facing glass facade when raised, and storm protection when closed. The project includes extensive landscaping to protect fragile wetlands and restore the meadows of the former sheep farm.

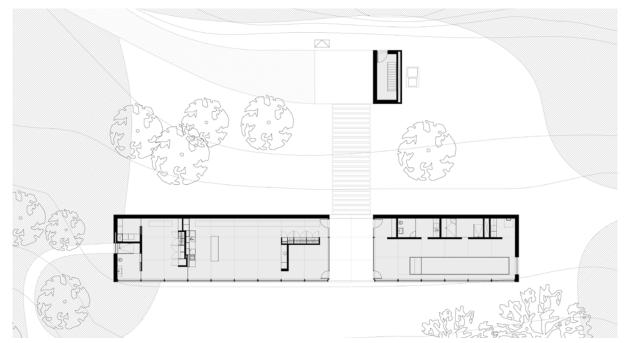
I worked with the firm's Principal and Project Architect during design development and preliminary construction document phases.

#### Primary Responsibilities:

- Design Development drawings
- 3D modelling and rendering
- Model making
- Product and material specification and research



- ↑ SITE LOCATION PLAN
- ↓ GROUND FLOOR SITE PLAN











- ↑ PROGRESS RENDERINGS
- → ARRIVAL WITH VIEW TO SEA (RENDERING)



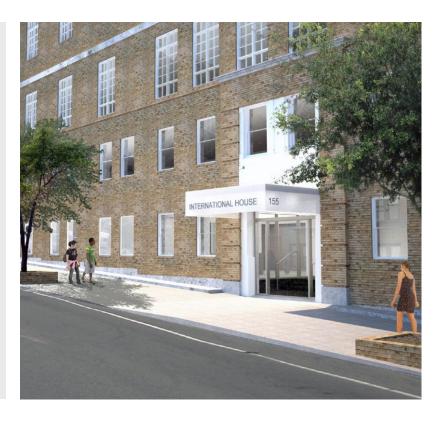
Architectural Designer

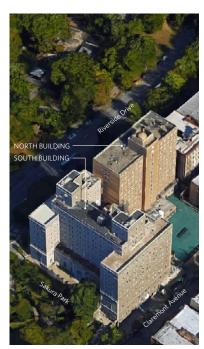
Private

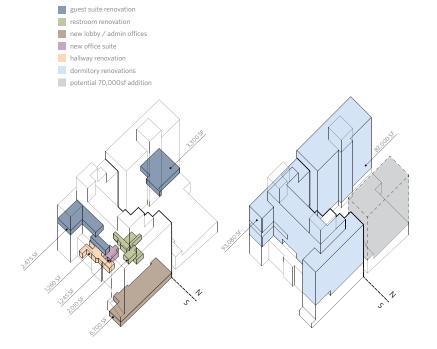
Master plan, zoning analysis, and phased renovation project for International House, a student residence and cultural institution. Located on Riverside Drive in Manhattan, I worked on the execution of a series of renovations including a new entrance and lobby, in progress. I led design and coordination of a multi-year renovation of resident rooms in two buildings.

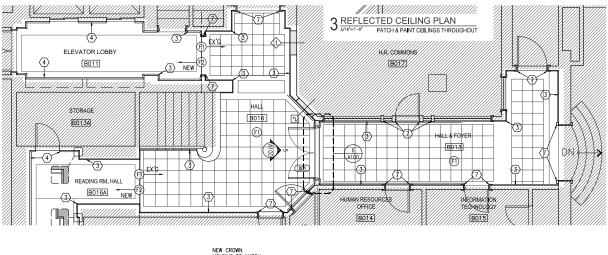
#### Primary Responsibilites:

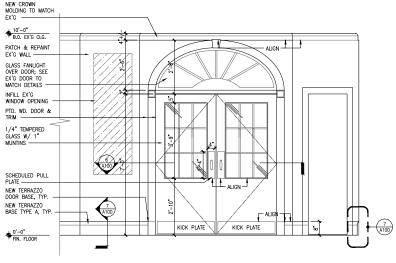
- Building survey and analysis
- Production of Building Assesment Report
- Presentation materials for I-House staff and board.
- Design development (all phases)

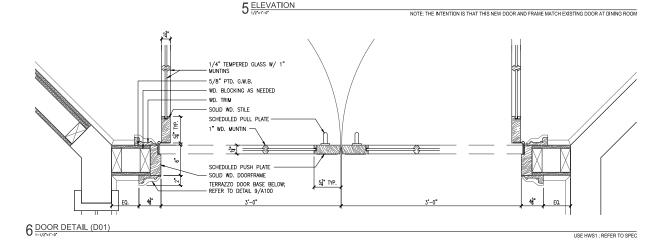












CLIENT

International House NYC

159 Madison Avenue

BELMONT FREEMAN ARCHITECTS

NEW YORK, NY, USA Summer 2015 - Spring 2016

Gut renovation of a 1911 co-operative top floor apartment in midtown Manhattan. Existing ceilings were removed, giving + 5'-0" additional height and allowing construction of a loft space. Minimal white palette of materials and custom designed elements throughout, including metal and wood stair, bathrooms and kitchen.

I worked with the firm's Associate Principal on this project from start to completion. This was the first time I took a lead role during construction administration, meeting with the general contractor on a weekly basis, responding to RFI's, and reviewing shop drawings / submittals.

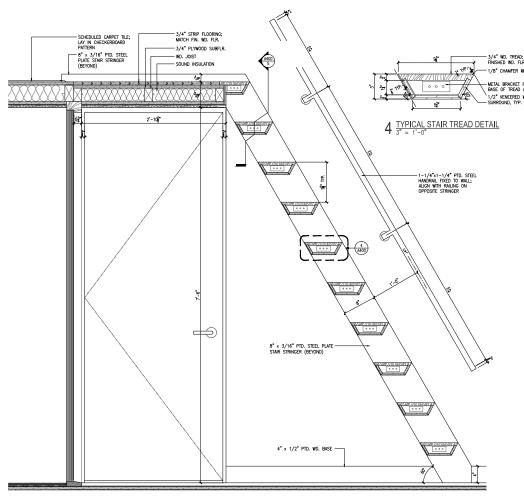
#### Primary Responsibilities:

- Client meetings / communications
- Production / preparation of biddable design documents
- Code research and securing of Co-op / DOB approval
- Construction Administration and project close out

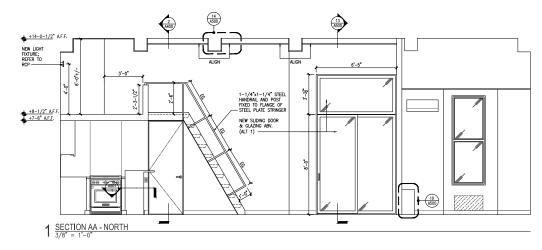


- ↑ NEW KITCHEN WITH LOFT ABOVE
- $\downarrow$  CUSTOM METAL AND WOOD STAIR





3 SECTION THROUGH STAIRS - NORTH



ROLE

Architectural Designer

**CLIENT**Private

Fall 2013



- ↑ ARRIVAL PERSPECTIVE [KINGSTON UNIVERSITY]
- ↓ AUDITORIUM PERSPECTIVE [KINGSTON UNIVERSITY]



**ROLE**Architectural Designer

I joined Grafton Architects to assist in the design and development of two competition entries for major UK universities: the London School of Economics and Kingston University. Our proposal for the latter was awarded first prize, whilst the former was one of 5 shortlisted entries amongst firms including OMA, Rogers Stirk Harbour + Partners, and Hopkins Architects.

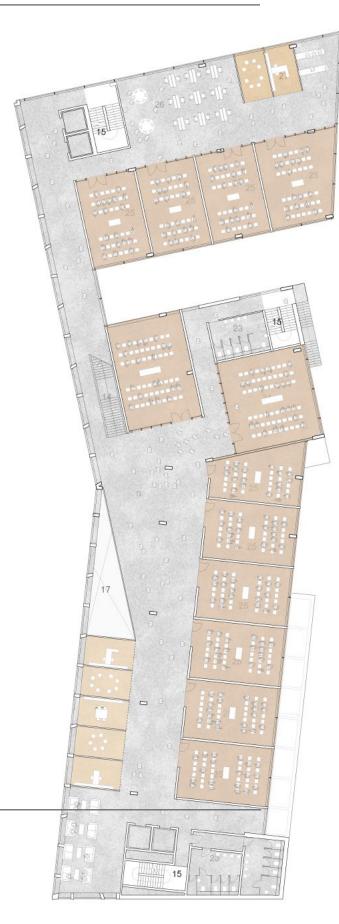
I worked closely with the lead architects to formulate final plans and layouts, coordinated with the structural engineer and landscape architect, and produced project images and final board layouts in an intensive, teambased office environment.

- → GROUND FLOOR PLAN [LSE GCSS]
- ↓ CROSS SECTION [LSE GCSS]



#### CLIENT

RIBA / London School of Economics / Kingston University



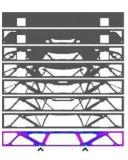
**Spenner Zement HQ** 

**BOLLES-WILSON** 

Our team won first prize in an architectural competition for the design of this iconic HQ. The office deck is balanced on a considerably smaller ground floor, with the ingenuity of the project being the design of the beam. Working with closely with the structural engineer, a parametric optimizing program removes redundant concrete to create the most minimal truss possible.

Primary Responsibilities:

Presentation diagrams, drawings and images

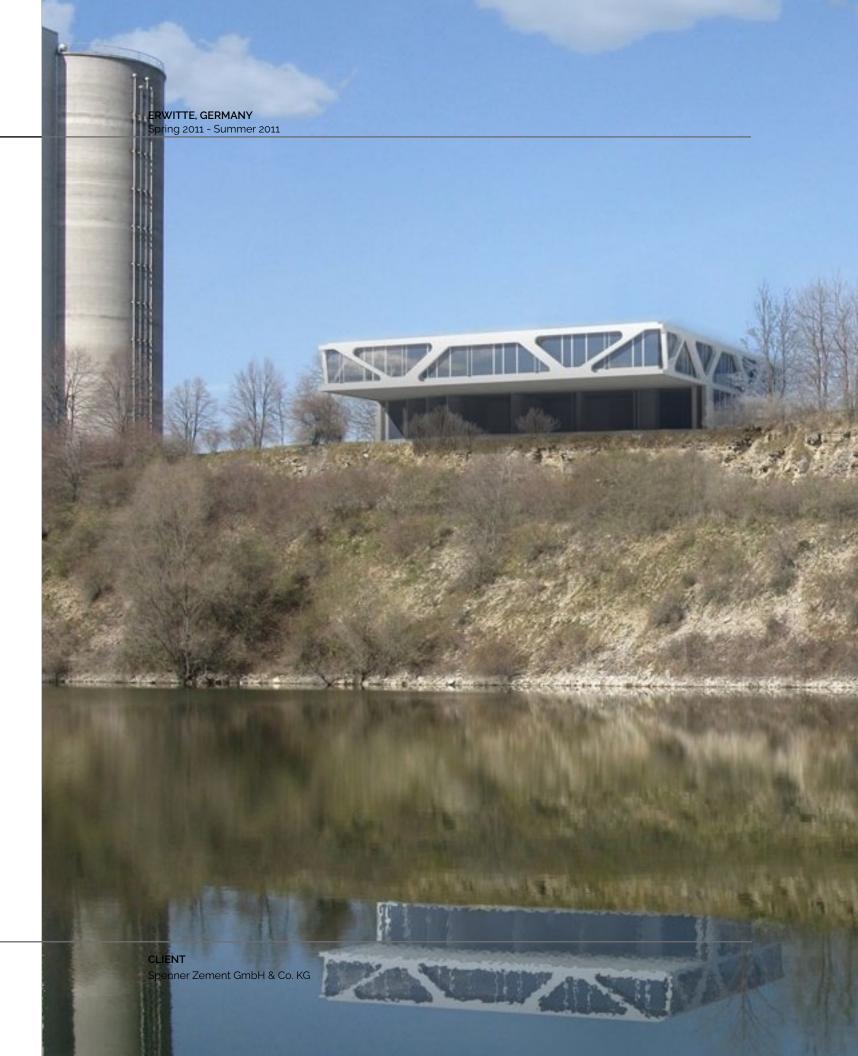




- ↑ INTERIOR RENDERING OF MANAGER'S OFFICE
- 7 'THE BEAM IS THE SCHEME' PARAMETRIC OPTIMIZATION DIAGRAM
- → EXTERIOR RENDERING
- ↓ COMPETITION WINNING IMAGE; BERM HIDES PARKING AREA







Fall 2010

At the crossroads of one of Shanghai's busiest intersections lies 3 metro lines, 7 roads, an urban park, and Shanghai's highest grossing shopping district. The problem created by the congestion has manifested itself solely by impeding pedestrian life.

Our team created an elevated promenade to connect the various malls, the ground surface, and the metro system. Alleys and underutilized plaza areas are incorporated to produce a better street life and storefront retail areas. Program along the promenade creates a place to stay, to meet, and to stroll.

#### Primary Responsibilities:

- Concept research and brainstorming
- Presentation diagrams, drawings and images



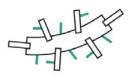
PROMENADE



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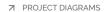
PROGRAM AND SCULPTURE



GROUND CONNECTION

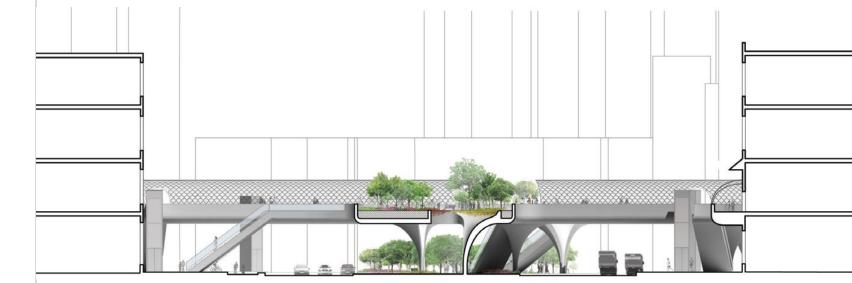


RETAIL NODE LINKS



 $\psi$  AERIAL VIEW (RENDERING BY HELIXSCAPE VISUALIZATION STUDIO)





- ↑ PERSPECTIVE SECTION
- ↓ CONCEPTUAL MASTERPLAN



ROLE

Architectural Designer

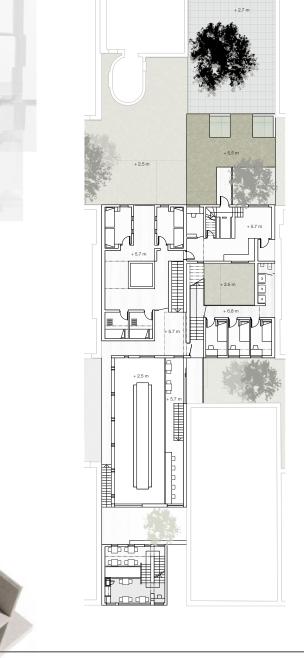
#### CLIENT

# THE ARCHITECTURE OF CURIOSITY

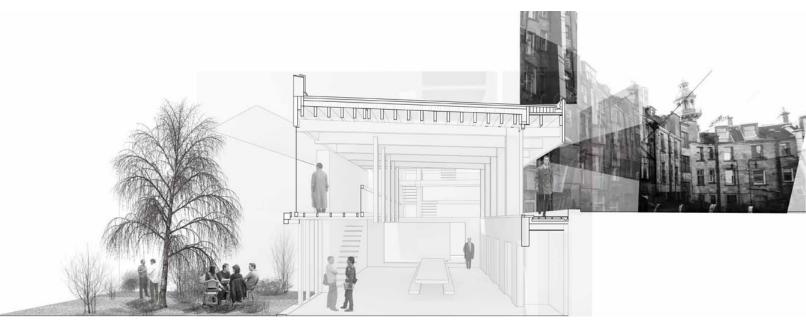
THESIS PROJECT

Inspired by ideas of 'the unknown', this Masters thesis proposed that an inherent curiosity can act to draw people through space, to explore what lies just out of view, just out of reach. The project provides a house for writers, in the form of a dormitory. A series of tea rooms acts as a screen to the street, while a dining hall links the house to the city, and the city to the house.

The intervention interacts with the existing fabric through a compress and release of spaces, both interior and exterior This brings inside outside, and outside inside.







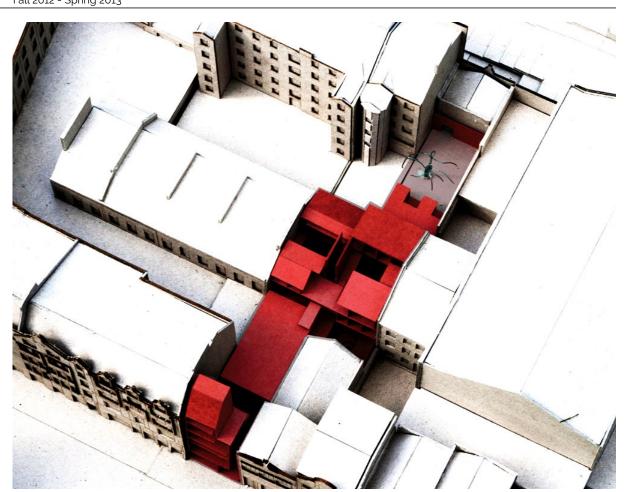
PROFESSORS
Peter Cody, Chris Boyle

# THE ARCHITECTURE OF CURIOSITY

#### THESIS PROJECT

# GLASGOW, SCOTLAND Fall 2012 - Spring 2013



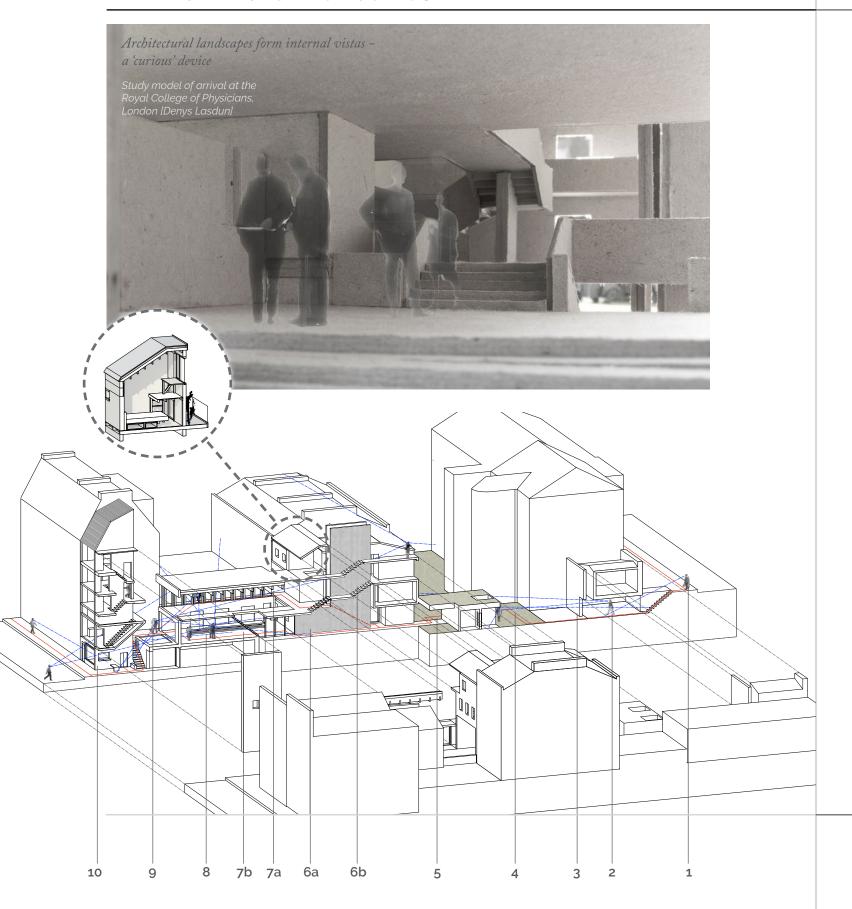


- ↑ SITE MODEL 'CONTEXTUAL WEAVE'
  ↓ SITE SECTION



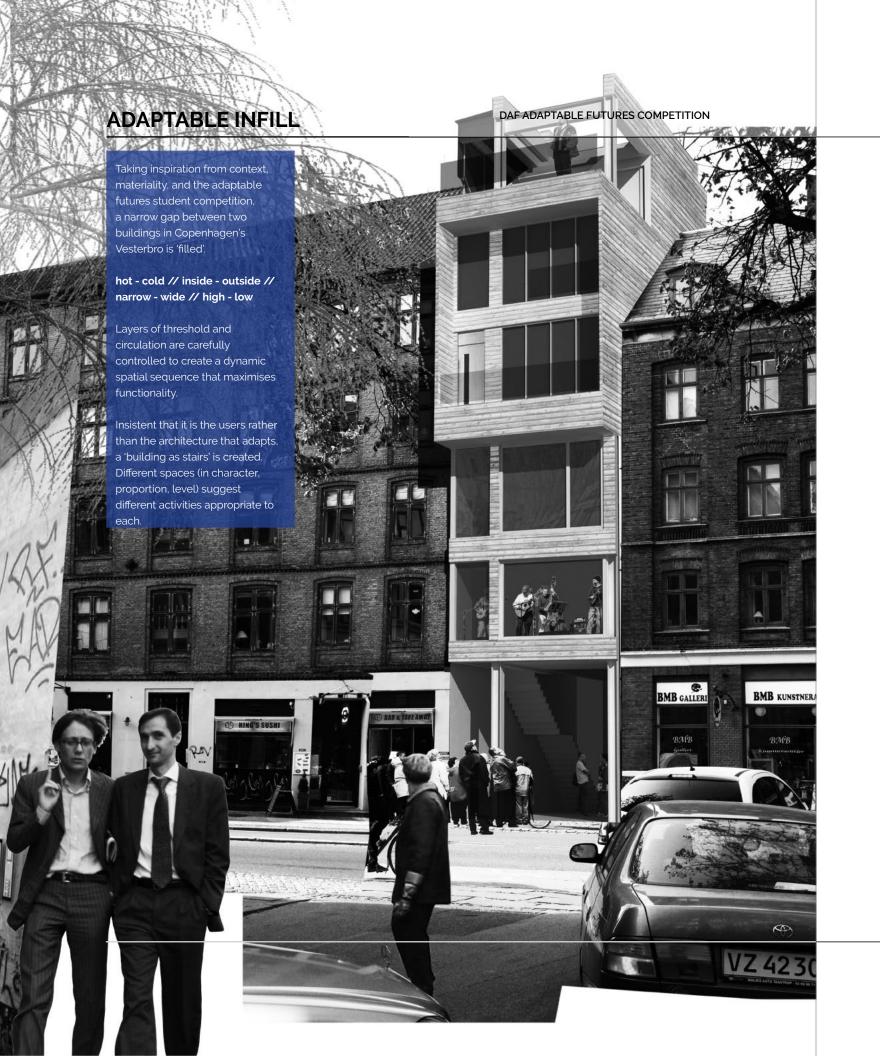
#### PROFESSORS

Peter Cody, Chris Boyle



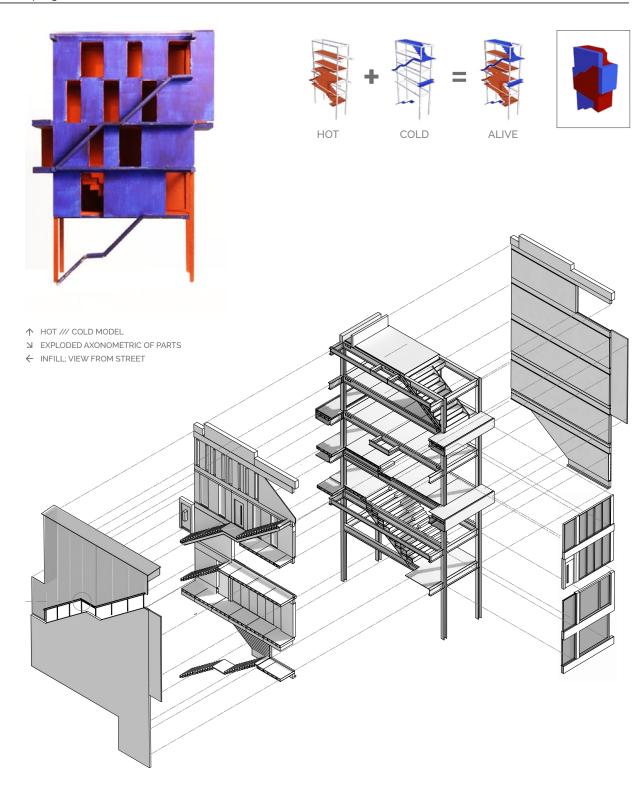


PROFESSORS
Peter Cody, Chris Boyle



## COPENHAGEN, DENMARK

Spring 2012



PROFESSORS

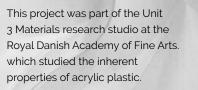
Katrine Lotz, Anne Mette

# **ACRYLIC TENDENCIES**

RESEARCH PROJECT
Materials Studio

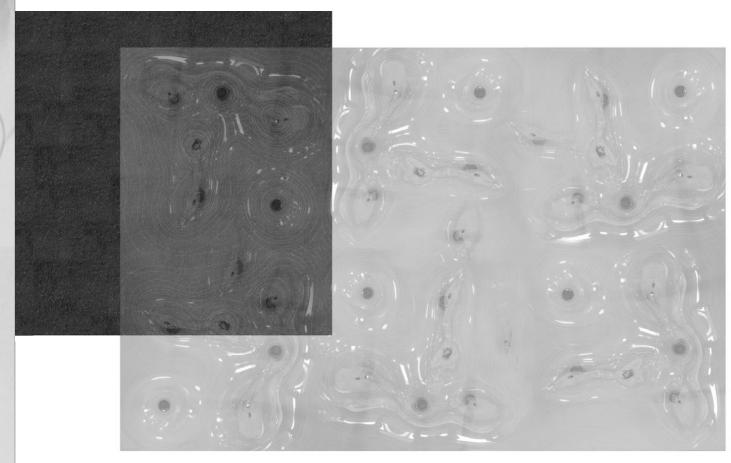
#### COPENHAGEN, DENMARK Spring 2012



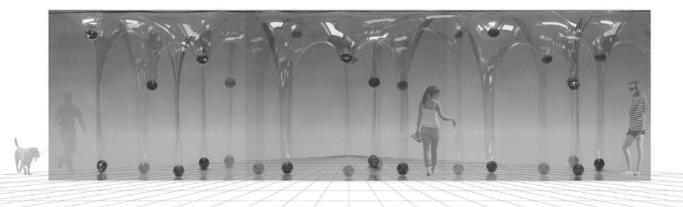


Plastic acrylic does not perform predictably at high temperatures. It's becomes unstable and warps erratically before hardening into it's distorted shape.

Our aim was bring an element of restraint to the randomized forms that are created, using a device that manually controlled acrylic deformations over steam.



- ↑ PLASTIC PAVILION, PLAN
- ↓ PLASTIC PAVILION, ELEVATION



PROFESSORS
Katrine Lotz, Anne Mette

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2018