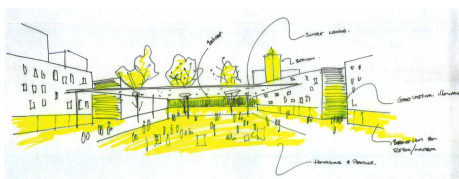
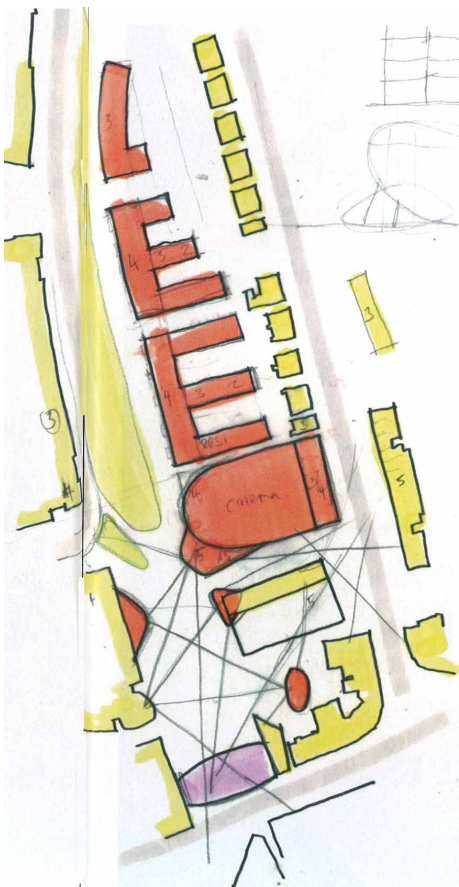


ARC5002 STUDIO DESIGN 2

LIVING & WORKING IN DIGBETH



PROJECT AIMS

The major design project ARC5002 focuses on design and fabrication. The project continues to build on experience and skills gained from the previous design exercises. The aim of the design project is to develop the design concept through a process of “learning by making and building”. The first task is “brief making”, working in tutorial groups to develop a brief. The studio design project is a vehicle to develop and demonstrate the integration of environmental design and technology in the design. Module ARC5007 Technology T5-2 [structure, construction and environmental design] workshops accompany and support this studio design project. ‘Technology days’ are programmed into the module.

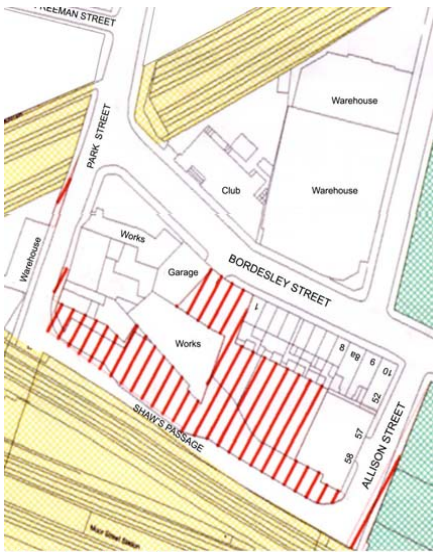
INDUSTRIAL BIRMINGHAM

“A city of makers and traders, Birmingham almost seemed itself to be ‘in the making’ always looking forward. Many people claimed that part of the reason for its growth was its freedom from rules. It had no charter to shackle it, and no ancient craft guilds to block enterprise with strict apprenticeship and trading rules.....Its citizens boasted of its industry, its independence, its bustle and its power. There were no great ironworks or manufactories this was chiefly a town of small independent masters, rarely employing more than twenty men and girls, with most of the work done by family or apprentices.” “In the 1720s the town [Birmingham] was already booming. Perched on its sandstone bluff, the new church of St. Philip [with a dome modestly modeled on St. Paul’s Cathedral] looked down over crowded streets to the fields beyond the river Rea. Forges and workshops clustered in low-lying areas around the alleys of Digbeth and Deritend, Well Street and Corn Cheaping, while the better-off citizens moved uphill to drier land and cleaner air, building new, modern houses and squares.” And “In reality Birmingham was noisy, dirty and chaotic. Yet its exuberant individualism and inventiveness made it just as much ‘a City of the Enlightenment’ as Bath, Edinburgh, or Bordeaux”.

Uglow, Jenny [2002] The Lunar Men, Faber and Faber, London pp. 17, 19 and 21

LEARNING OUTCOMES

1. Demonstrate knowledge of the industries, organisations, regulations and procedures associated with the profession
2. Demonstrate ability to employ physical and/or virtual modeling techniques in support of an individual intervention.
3. Employ appropriate research methodologies to inform considered judgments throughout the design process.



THE EASTSIDE ECOHUB
Location plan of the proposed development. Land owned by Birmingham City Council is hatched in red.
Joe Holyoak Architect and Urban Designer.
drawing not to scale.

4. Demonstrate ability to verbally and visually communicate research and design propositions, employing conventions of architectural representation including two dimensional and three-dimensional graphics.

CONTEXT

How far is it appropriate to describe younger people today as 'Generation Rent'? Does the housing system provide sufficient opportunities and space for self-help, self-build and co-production – what might be some of the barriers and how might they be overcome? Should social housing be solely about renting and about bricks and mortar or should people also be facilitated in other ways, for example to find jobs and pay the rent?

SITE

The site is located in Digbeth and is bounded by Park Street, Bordesley Street, Shaw's Passage and Allison Street where you have already carried out the site appraisal and analysis.

The design proposition must be represented in its wider context.

COMMUNITY LAND TRUST

Community land trusts (CLTs) are locally-based not-for-profit organisations that own land and property in trust for the benefit of a defined community. Already well-established in the USA, community land trusts work on the basis that housing charges remain affordable but that the land and any subsidies or planning gain remain with the trust to ensure affordability in the long-term. They are increasingly recognised as one possible means of overcoming the widespread problems of social exclusion and unaffordable housing caused by escalating land values in the UK. As well as ensuring long-term affordability, CLTs also encourage active citizenship by giving local people collective control of decisions in relation to land and assets.

<http://www.bshf.org/ukhpp/clt/?lang=00>

The advantage of limited- or shared-equity co-operative housing is essentially practical. Uniquely co-operative forms of housing benefit from several intrinsic cost savings:

- In the cheapest limited equity forms, borrowing is corporate, not individual, which can reduce interest on borrowing costs for new housing acquisition.
- Tenant participation in management can save on some overheads and exert continuous disciplinary pressure for "best value" in professional management fees.
- Tenure can be kept simple; a repairing lease (where it is the tenant's responsibility in this case to carry out interior repairs) can be assigned, and equity shares can also be assigned through a transparent resale formula.

DEVELOPING THE BRIEF/ ACCOMMODATION SCHEDULE

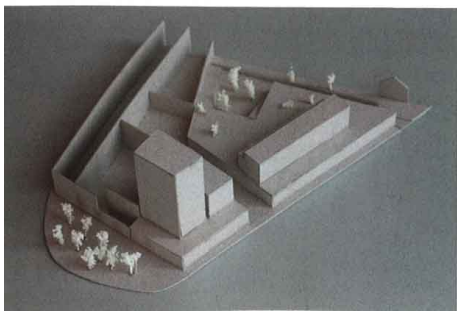
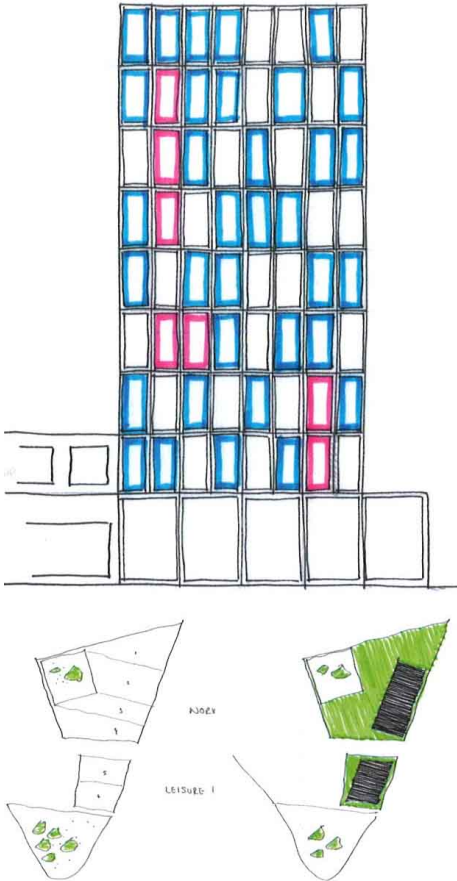
Working in groups, the first task is, to develop the brief – brief making. From the suggested requirements below you are to produce a brief for living and working, a schedule of accommodation with areas for the activities. There should be a variety of rented and owned homes, various sized and types of homes. The site can accommodate around 15-20 homes and between 4-8 workspaces. You will need to consider the retention of the locally listed houses already on the site, together with some of the community businesses, as a starting point for building a community on the site.

- > living space(s) for families
- > living space(s) for single people
- > living spaces for sharers
- > community green space(s)
- > bicycle storage
- > 3 visitor parking spaces (optional)
- > parking space for one or more shared electric car
- > rented small business units / retail outlets

DESIGN CONSIDERATIONS:

- > orientation
- > topography
- > use of local materials to minimise transportation
- > (rooftop?) gardens

- > pedestrian and vehicle access
- > fire strategy, access for fire appliance
- > energy efficiency in construction and use
- > use of recycled materials
- > rainwater recycling
- > cross ventilation
- > passive solar heating
- > construction sequencing



Drawings from Architects Journal / Phillips
Lighting sponsored "Pechham Charrette"
January 2012.
<https://www.2degreesnetwork.com/groups/smart-cities/resources/philips-livable-cities-inspiration-behind-peckham-charrette/>

CHARRETTE Friday 10 January BRING WITH YOU

A2 layout pad; Magic markers – 3 colours at least; Brown card/board; Cutting board; Scalpel; Scissors; Cartridge paper; Laptop or iPad; Camera; Site model, Scale rule; Glue gun; T-square; Set square; Pencils. Bring digital copies of your precedent studies, site analysis, planning/briefing matrix to refer to.

TASKS

Make concept models to fit on the site model
Draw long sections through the models in each direction including the surrounding buildings and landscape
Show organisational diagrams
General plan of each different level
Environmental diagram

STUDIO TUTORIAL PRACTICE

For each studio tutorial session you will be required to pin up your work to date. You should resolve your site analysis, concept definition and development into single sheets that can be pinned up each week as background contextual information for your current design development. Your site analysis and concept will continue to evolve to reflect the development of your proposition as will the sheets showing them.

ASSESSMENT REQUIREMENTS

FORMATIVE REVIEW 14 February

The sketch design should include sketch/work book drawings showing the process and development of the design, development models showing the massing of the proposal in context. Use A2 sheets or, if a digital presentation, A4 prints of the presentation are to be pinned-up for viewing.

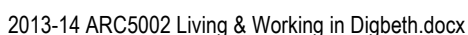
FORMATIVE REVIEW 21 March

Completed proposal - including precedents, site analysis, models, developed plans, sections, elevations and integrated technology information all in surrounding context. The aim is to get quality feedback on complete presentation and information to make final improvements.

SUMMATIVE REVIEW 4 April

The revised completed presentation can be mixed-media demonstrating your abilities in hand and digital drawing, the use of CAD and model making. The presentation should be on an A2 sheets showing plans, sections and elevations [in context] together with photograph[s] showing model[s]. 1:20 Construction section, elevation & plan. An important element of the assessment is the quality and precision of your drawings that form your presentation together with the design of the sheets. Sketch/note book showing development of the design is to be available.

All drawings presented are to clearly show your name. Remember printing/plotting will have to be done the day before the review. All work to be pinned-up by 09.45am.



TERM 2

[★ indicates requirements for the session]; [GHA = indicates session at Glenn Howells Architects Bradbury Street]

WEEKLY PROGRAMME TIMETABLE		ACTIVITY
01 Tuesday 7 January 11-13.00 /14-17.00	JS JL HV	ARC5007 SUMMATIVE GROUP-WORK REVIEW
Friday 10 January	JL HV JM WW	'Charrette' one-day design workshop: Work groups brief making and concept development Glenn Howells Studio, Bradford Street
02 Tuesday 14 January.	JL HV	Studio tutorials
Friday 17 January	JL HV JM WW	am::Master planning and living / working typologies and precedents ★ Finalise individual brief pm: Tidy up P436 in preparation for RIBA Visiting Board
03 Tuesday 21 January	JL HV	GHA: Studio tutorials
Friday 24 January	JL HV IS	GHA: Technology Day 1 ★ Precedent studies/sketch studies for materials/construction, environmental design and structural principles; initial proposal site layout
04 Tuesday 28 January	IS JL HV	GHA: ARC5007 Costs & Regulations workshop 11-13.00 Studio tutorials 14-17.00
Thursday 30 January		13-13.45 RIBA Visiting Board Student Lunch 14-15.00 RIBA Visiting Board Student Meeting
Friday 31 January	JL HV JM WW	★ Sketch plans, sections and massing models with technology [RIBA Visiting Board continues all day]
05 3-7 February		Study Visit and Building Review
06 Tuesday 11 February	JL HV	13.00 ARC5007 INDIVIDUAL SUBMISSION Studio tutorials 11-13.00 14-17.00
Friday 14 February		FORMATIVE REVIEW: sketch design exploring the implications of planning/ context/ structure/ construction/ environmental design. ★ Workbook, all work to date, precedents, site and details
07 Tuesday 18 February	IS JL HV JL HV	Management Planning Law 2: Architects practice 11-13.00 Studio tutorials 14-17.00
Friday 21 February		Technology Day 2: ★ Structure materials construction & environmental design strategy
08 Tuesday 25 February	JL HV TT	Studio Tutorials Graphics tutorials 13-17.00
Friday 28 February	JL HV JM WW	Detailed elevations, sections, plans, model, 3D views inside and outside, inegration of structure, materials & environment
09 Tuesday 4 March	JL HV TT	Studio Tutorials Graphics tutorials 13-17.00
Friday 7 March	JL HV JM WW	Technology Day 3: ★ Developing 1:20 integrated structural, construction & environmental design section and model
10 Tuesday 11 March	JL TT	Studio Tutorials Graphics tutorials 13-17.00
Friday 14 March	JL HV JM WW	Precedents, site analysis, models, plans, sections, elevations, integrated technology information.
11 Tuesday 18 March	IS JL HV JL HV	Management Planning Law 3: Role of the architect 11-13.00. Studio tutorials 14-17.00
Friday 21 March	JL HV JM WW	FORMATIVE REVIEW: ★ precedents, site analysis, models, developed plans, sections, elevations, integrated technology information.
12 Tuesday 25 March	JL HV	Studio tutorials
Friday 28 March	JL HV JM WW	Presentation preparation
13 Tuesday 1 April	JL HV	Studio tutorials
Friday 4 April	JL HV JM WW	SUMMATIVE REVIEW: ★ Completed design and technology proposition. Feedback and briefing for exhibition sheets.

TERM 3

WEEKLY PROGRAMME TIMETABLE		ACTIVITY
Monday 7-Friday 25 April		EASTER VACATION
01 Monday 28 April 10.00 am		ARC5004 ESSAY SUBMISSION
Tuesday 29 April 9-12.00 am	JS	New Street Site Visit
Friday 2 May	JL HV JM WW	SUMMATIVE REVIEW: Exhibition drawing Pin up of 2 x A2 sheets
02-03 Tuesday 6-Friday 16 May		WORK PLACEMENT
04 19-23 May		EVENTS WEEK 1
Tuesday 20 May 10.00 am		ARC5004 MPL SUBMISSION
Friday 23 May 10.00 am		PORTFOLIO SUBMISSION
05 26-30 May		EVENTS WEEK 2
Tuesday 27 May 9-12.30 am	JS	New St Site Visit
06-07 2-11 June		Exhibition preparation
Wednesday 11 June 18.00 pm		EXHIBITION PRIVATE VIEW
08 15-20 June		Exhibition
20 June		END OF TERM (Students expected to remain in attendance until end of term)

