



Case study:
Grain House-Hayhurst and Co.

ATD. Year 3:
Collaborative Practice in BIMM

Tutor:
Andrew Bourne - andrewbourne@uwe.ac.uk

Softwares used:
Revit, InDesign, Photoshop, Twinmotion



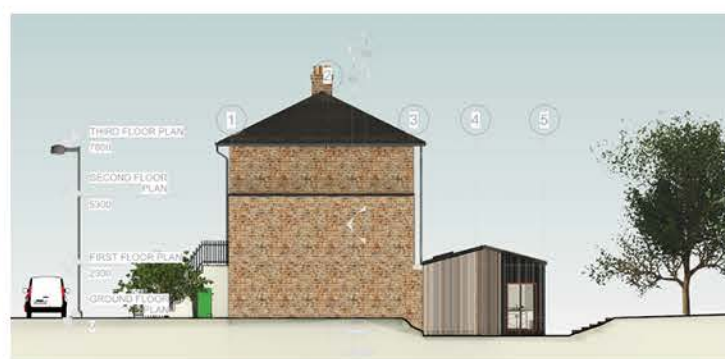
Front External
Panoramic view



Exterior Street render



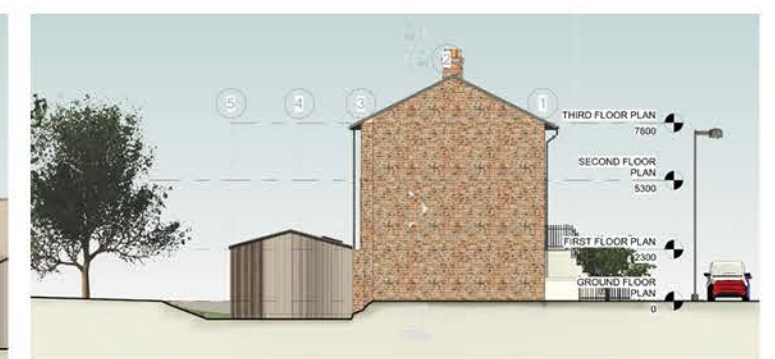
East Elevation 1:100



South Elevation 1:100



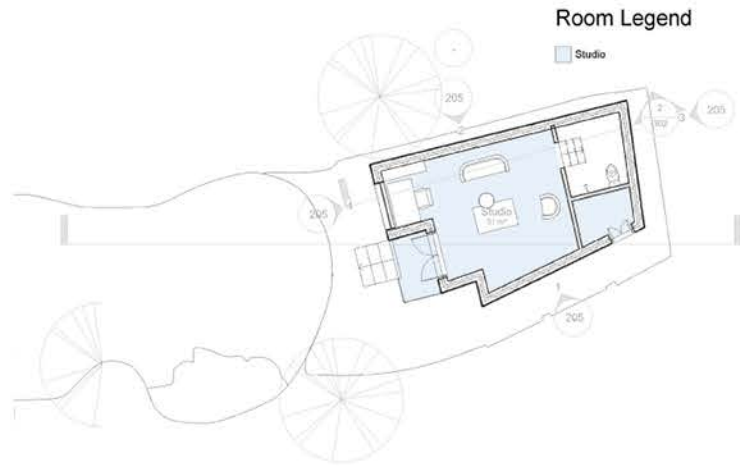
North Elevation 1:100



North Elevation 1:100

Scenario:

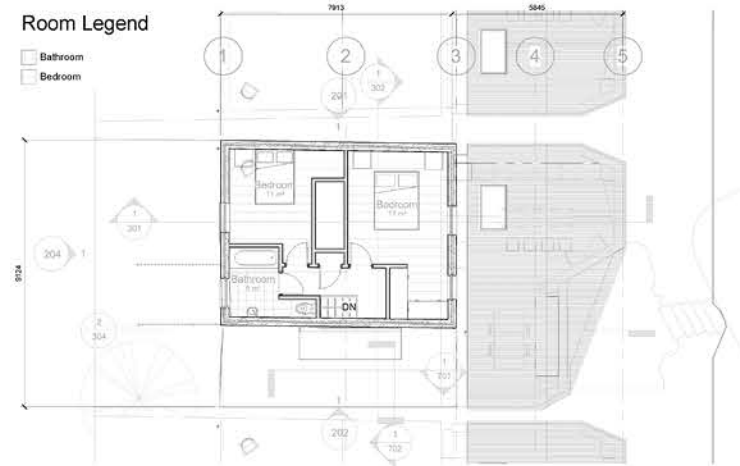
A small CIAT/CIOB practice with five architectural staff has won a bid to design and manage a new residential property for a private client. The project, which has a construction budget between £750,000 and £5,000,000, requires engagement with the UK BIM Framework. The practice has received planning approval and started on site, ensuring a smooth construction process. Draft Tender package including project information.



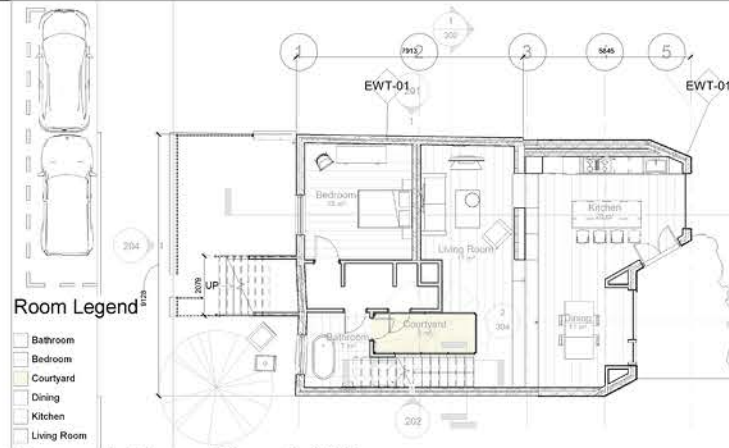
Studio Floor Plan 1:100



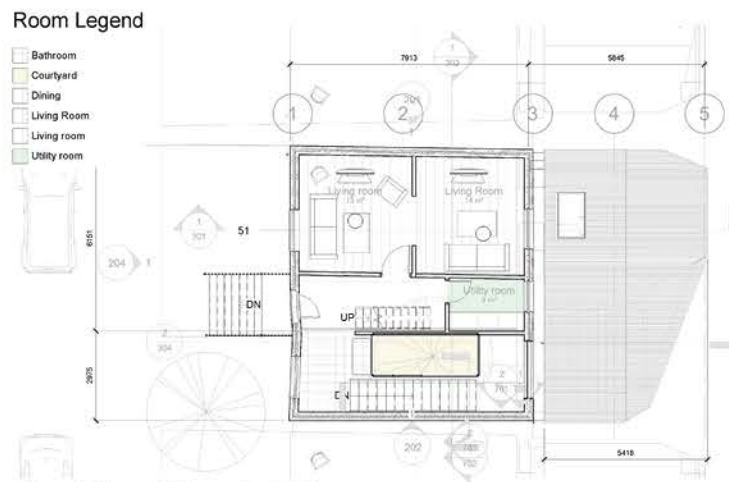
Rear External
Panoramic view



Second Floor Plan 1:100



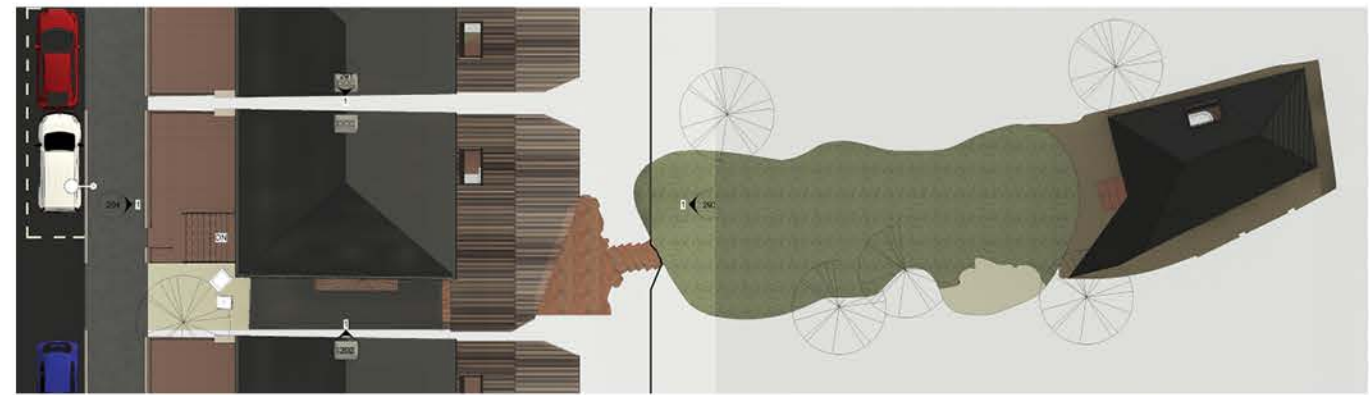
Ground Floor Plan 1:100



First Floor Plan 1:100



Internal
Panoramic view



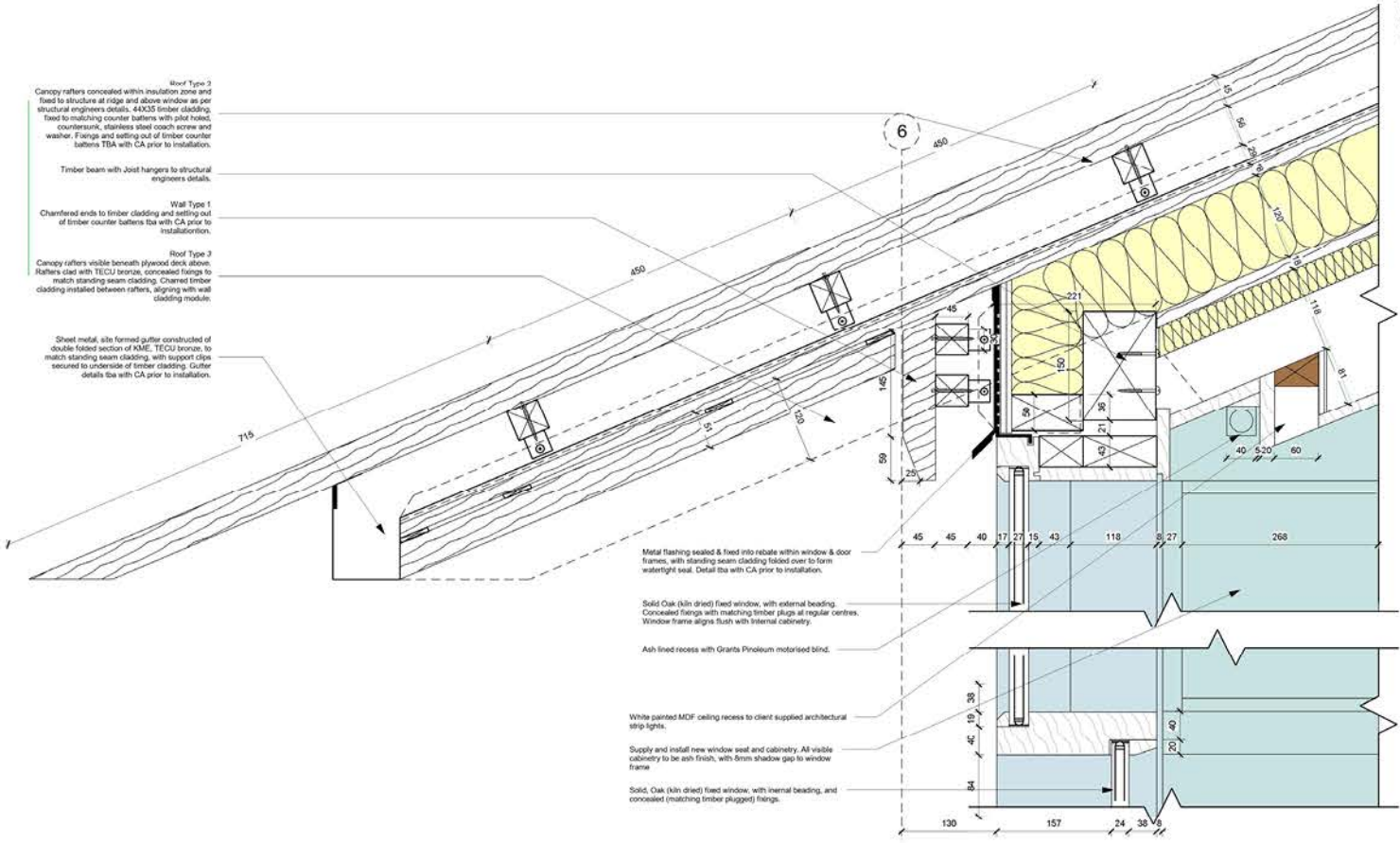
Cross-Section 1:100



Longitudinal Section 1:100



Interior Studio Render



Eaves Detail (2-702)

No.	Wall Build Up Section View	Plan View
1.	 EXT_01_290mm -102.5mm Bwk -37.5 Air -37.5 Insu -100 Bk -12.5P	
2.	 EWT_02_290mm -12.5mm Bwk -100mm Bk -65.0 Air -100mm Bk -12.5mm P	
3.	 Ext_03_280mm -12.5mm Bwk -90mm Crute -65mm Air -100mm Crute -12.5mm P	
4.	 EWT_02_290mm -12.5mm Bwk -100mm Bk -65.0 Air -100mm Bk -12.5mm P	
5.	 INT_01_130mm -30mm Gwb -70mm Msd -35mm Gwb	

Wall build-up Legend

No.	Name	Section View	Floor Legend
1.	Floor-Gnd-Slab 200mm		 -20mm Tile Quarry -0.0mm Membrane -40mm Insu -60mm Air -100mm Concrete -40mm Concrete Precast
2.	Floor-Gnd-Slab 200mm		 -20mm Wood -0.0mm Membrane -40mm Insu -60mm Air -100mm Concrete -40mm Concrete Precast
3.	Floor-Gnd-Slab 200mm		 -20mm Wood -0.0mm Membrane -40mm Insu -60mm Air -100mm Concrete -40mm Concrete Precast
4.	Floor-Gnd-Slab 200mm		 -20mm Wood -0.0mm Membrane -40mm Insu -60mm Air -100mm Concrete -40mm Concrete Precast
5.	Floor-Ting 200mm		 -20mm Tile Quarry -40mm Insu -100mm Concrete -40mm Concrete Precast
6.	Floor-Timber 470mm		 -45mm Birch -80mm Insu -150mm Air -100mm Concrete -75mm Concrete Precast

Floor build-up Legend

Wall Schedule						
WT	Family and Type	Length	Uncon Height	Width	Type Mark	Area
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	7417	2300	290	EWT-01	17 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	1429	2000	290	EWT-01	7 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	7381	7800	290	EWT-01	66 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	6204	3000	290	EWT-01	14 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	4226	2300	290	EWT-01	8 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	6017	2500	290	EWT-01	12 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	7912	2500	290	EWT-01	19 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	6038	2500	290	EWT-01	11 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	1682	5300	290	EWT-01	7 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	900	2866	290	EWT-01	3 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	388	8366	290	EWT-01	4 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	502	2866	290	EWT-01	1 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	7798	3330	290	EWT-01	23 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	2729	3000	290	EWT-01	6 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	4429	3000	290	EWT-01	10 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	7417	2300	290	EWT-01	17 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	7381	7800	290	EWT-01	66 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	6204	3000	290	EWT-01	14 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	6017	2500	290	EWT-01	12 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	7912	2500	290	EWT-01	19 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	6038	2500	290	EWT-01	11 m²

Wall Schedule						
WT	Family and Type	Length	Uncon Height	Width	Type Mark	Area
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	6204	3000	290	EWT-01	14 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	6017	2500	290	EWT-01	12 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	7912	2500	290	EWT-01	19 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	6038	2500	290	EWT-01	11 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	1582	5300	290	EWT-01	7 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	900	2866	290	EWT-01	3 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	388	8366	290	EWT-01	4 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	502	2866	290	EWT-01	1 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	7798	3330	290	EWT-01	23 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	2729	3000	290	EWT-01	6 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	4429	3000	290	EWT-01	10 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	7417	2300	290	EWT-01	17 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	7381	7800	290	EWT-01	66 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	6204	3000	290	EWT-01	14 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	6017	2500	290	EWT-01	12 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	7912	2500	290	EWT-01	19 m²
Basic Wall	Basic Wall: EXT_01_102.5mm Bwk-37.5-Air-37.5	6038	2500	290	EWT-01	11 m²

Project Name	Grain House	Sheet Name	Wall Schedule	CODE	STATUS	SUSTAINABILITY DESCRIPTION	PURPOSE OF ISSUE
Author	Ambrosius Lipine	Date	Issue Date	Project Number	Scale	@ A3	
Student Number	Designer	Drawn by	Checker	REV			
Client Name	Owner	Drawn by	Checker	REV			
Location	314 Stamford Rd, London SE1 4AP						
Module/Subject Year	SEM YEAR 3	DRAWING NUMBER	504				

Example of Wall Schedule and Preview of information on Construction sheet

Stair Short Section - Callout 1	
1	1:20
Project Name	Grain House
Author	Ambrosius Lipine
Student Number	Designer
Client Name	Owner
Location	314 Stamford Rd, London SE1 4AP
Module/Subject Year	SEM YEAR 3
Sheet Name	Staircase Detail
Date	Issue Date
Project Number	Scale
Drawn by	Checker
REV	

Staircase Information	
No.	Description
1	Staircase
2	Staircase
3	Staircase
4	Staircase
5	Staircase
6	Staircase
7	Staircase
8	Staircase
9	Staircase
10	Staircase
11	Staircase
12	Staircase
13	Staircase
14	Staircase

Table 11 Rise and going	
Rise*	Going**
Minimum [mm]	Maximum [mm]
150	220
160	230
170	240
180	250
190	260
200	270
210	280
220	290
230	300
240	310
250	320
260	330
270	340
280	350
290	360
300	370
310	380
320	390
330	400

Staircase Information. Information about Document K Building Regulations