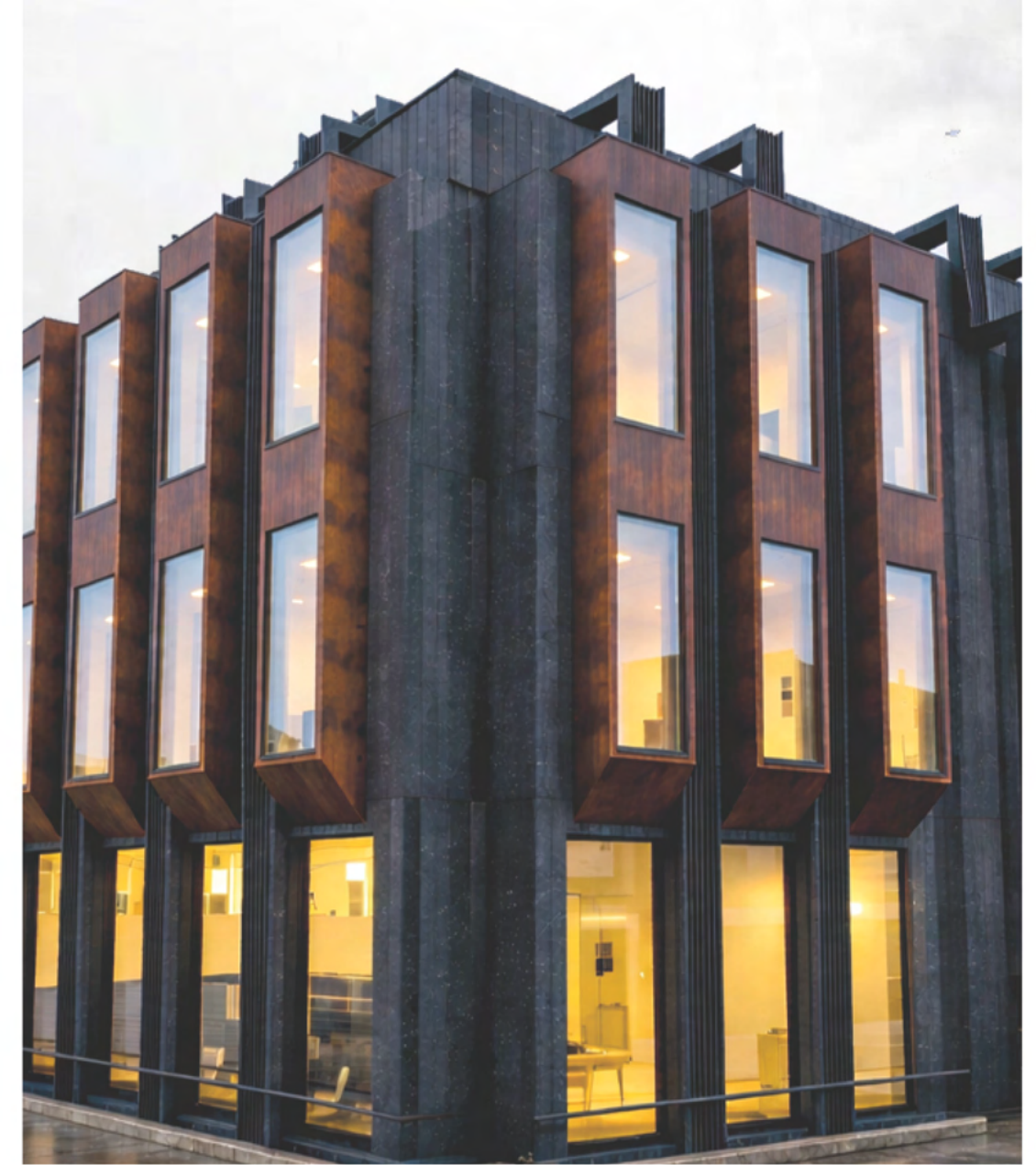




THE EMBERS HOTEL

GEORGE BROWN
UNIVERSITY OF GLOUCESTERSHIRE

28-35 Bordesley Street
Digbeth
Birmingham
B5 5BL

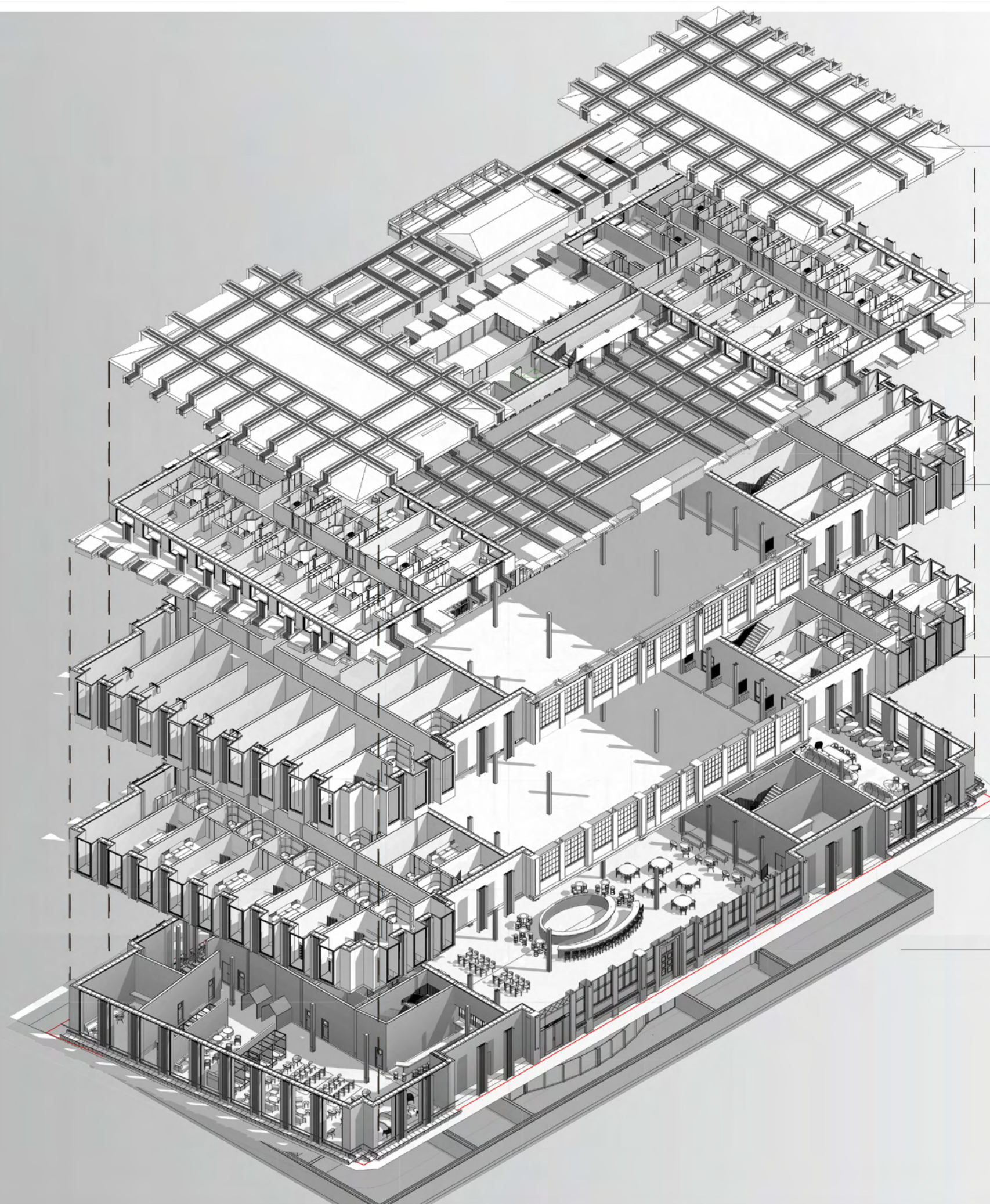


Concept

The Embers Hotel is designed as a functional, industrial business hotel that reflects Birmingham's manufacturing legacy and postwar resiliency. The design focusses on clarity, durability, and age, reflecting the city's historic role as the "workshop of the world." The facade, clad in Shou Sugi Ban hardwood, a burned wood finish that alludes to the Black Country's industrial pollution and Birmingham's severe bombardment during WWII.

Fire, destruction, and industry are re imagined as strength and longevity, transforming past damage into a protective architectural skin. Internally, the hotel follows an industrial logic rather than an industrial appearance, with clear circulation, locally referential materials, and areas defined by function.

The project presents a contemporary interpretation of Birmingham's identity, one that acknowledges its past while supporting the needs of modern professional life.



Roof - (17000)

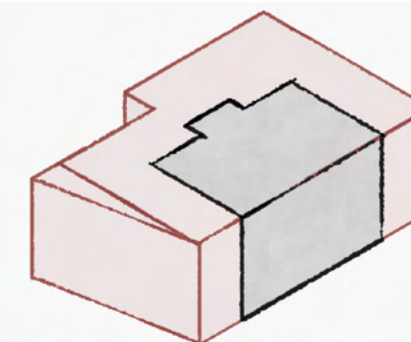
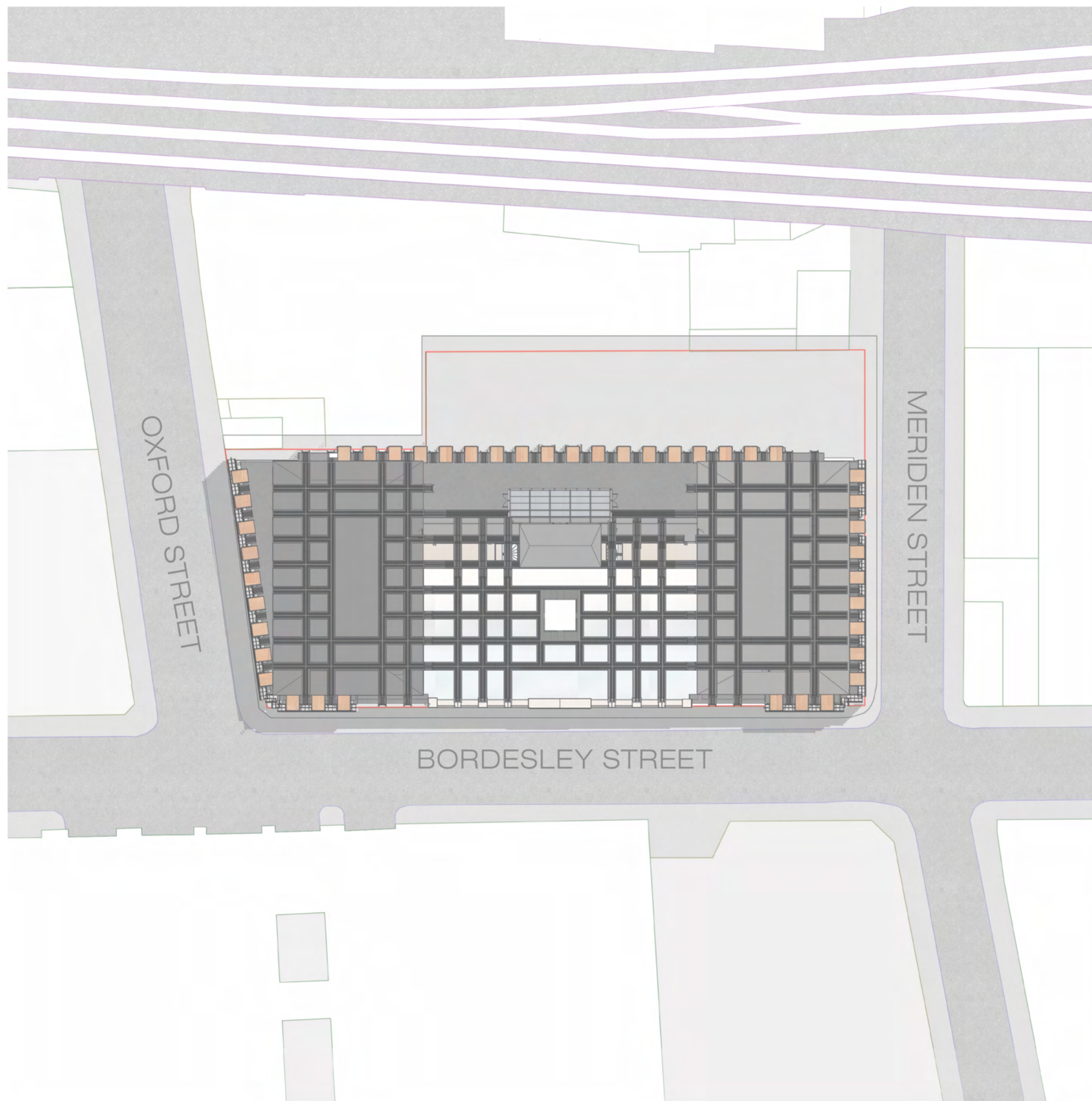
Roof Floor - (15000)

Second Floor - (10400)

First Floor - (5500)

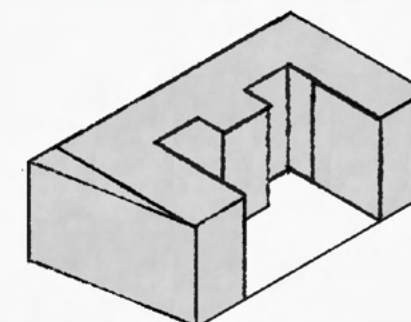
Ground Floor - (0.00)

Basement - (-2400)



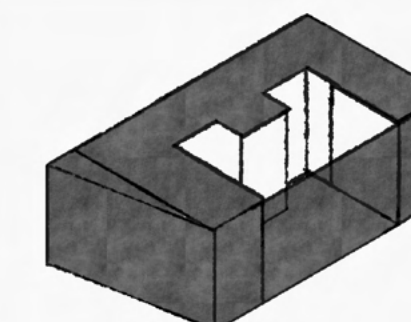
Form -

Solid Extrusion of site boundary including existing building



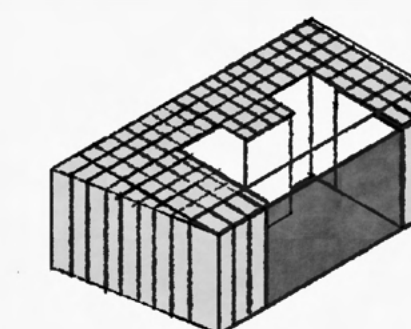
Dividing Form -

Form partitioned to prioritise the functions within the building



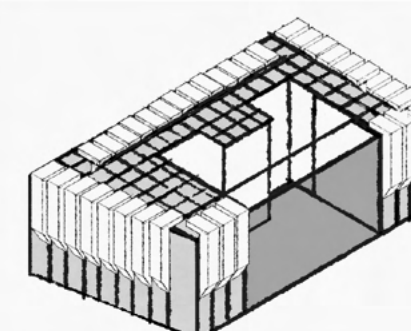
First Typology -

Existing building forms a barrier between spaces and facilitates circulation



Division of Space -

Divided facade to facilitate function for guest views and form



Final Form -

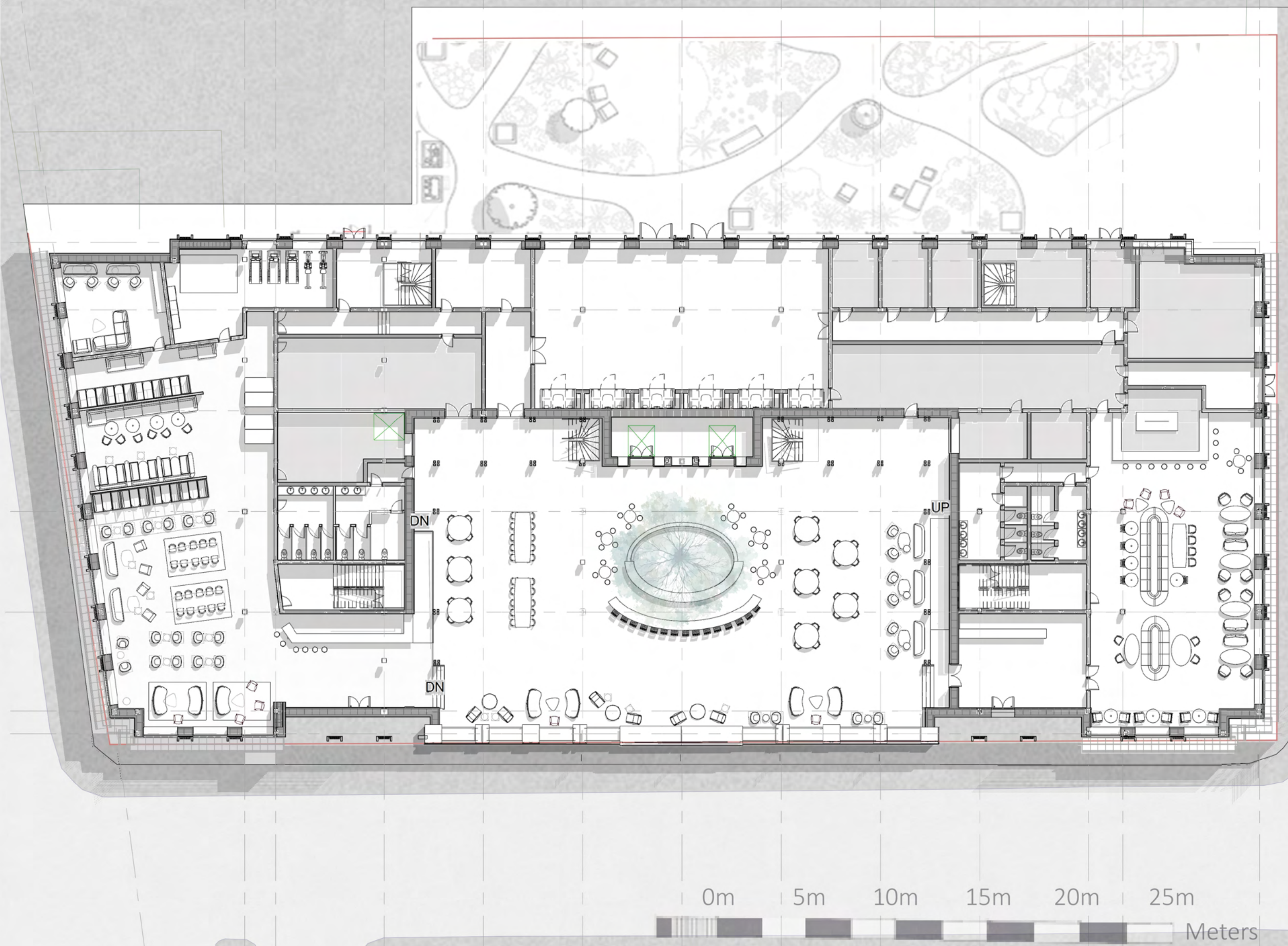
Final form achieved



Ground Floor

Plan 1:250

- ENTRANCE — 35 m² 1
- ATRIUM KITCHEN — 66 m² 2
- HEAD CHEF OFFICE — 11 m² 3
- LIVING ZONE — 179 m² 4
- RESTAURANT KITCHEN — 66 m² 5
- DISH WASHING — 11 m² 6
- RESTAURANT BATHROOM — 35 m² 7
- OPEN KITCHEN — 27 m² 8
- RESTAURANT — 217 m² 9
- PUBLIC TOILETS — 40 m² 10
- HOUSEKEEPING — 26 m² 11
- CONFERENCE ROOM — 116 m² 12
- CONFERENCE BANQUET — 44 m² 13
- BEER / WINE STORAGE — 12 m² 14
- FAMILY ROOM — 41 m² 15
- GYM — 41 m² 16
- DELIVERY — 47 m² 17
- RECEPTION — 21 m² 18
- WORKING ZONE — 109 m² 19
- ATRIUM — 676 m² 20



Typical Floor

Plan 1:250

TYPICAL BEDROOM — 42.28
M²

EXTENDED ROOM --
43.41 - 47.31 M²

DDA ROOM —
38.18 M²

SUITE —
66.7 M²

ROOM COUNT

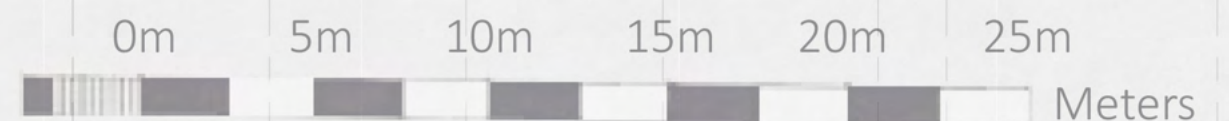
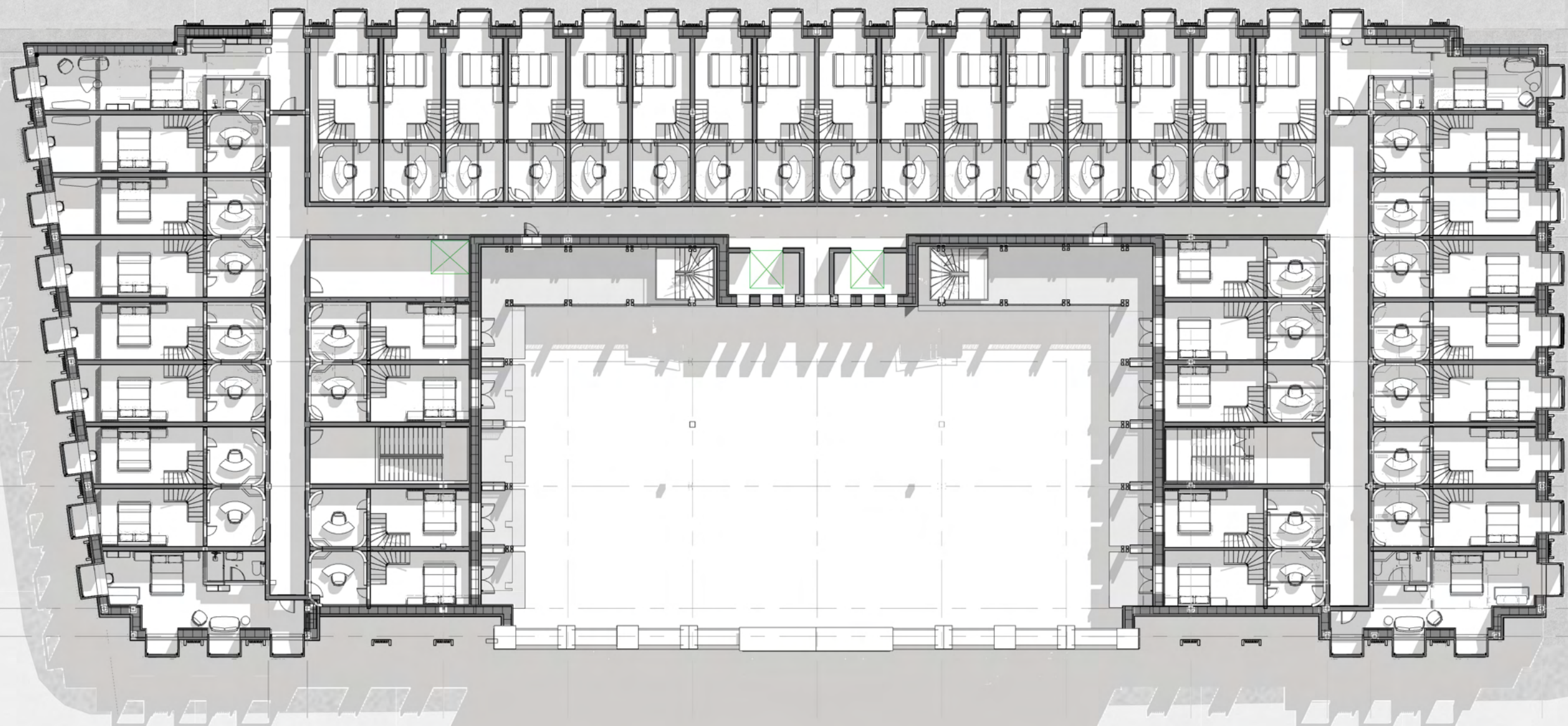
TYPICAL BEDROOM — 34

EXTENDED ROOM — 6

DDA ROOM — 2

SUITE — 2

TOTAL — 44



Roof Floor

Plan 1:250

TYPICAL BEDROOM —
42.28 M²

EXTENDED ROOM --
43.41 - 47.31 M²

DDA ROOM —
38.18 M²

SUITE —
66.7 M²

ROOM COUNT

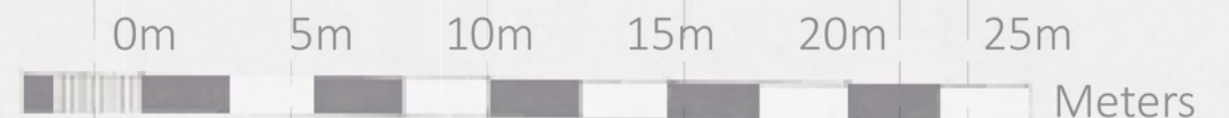
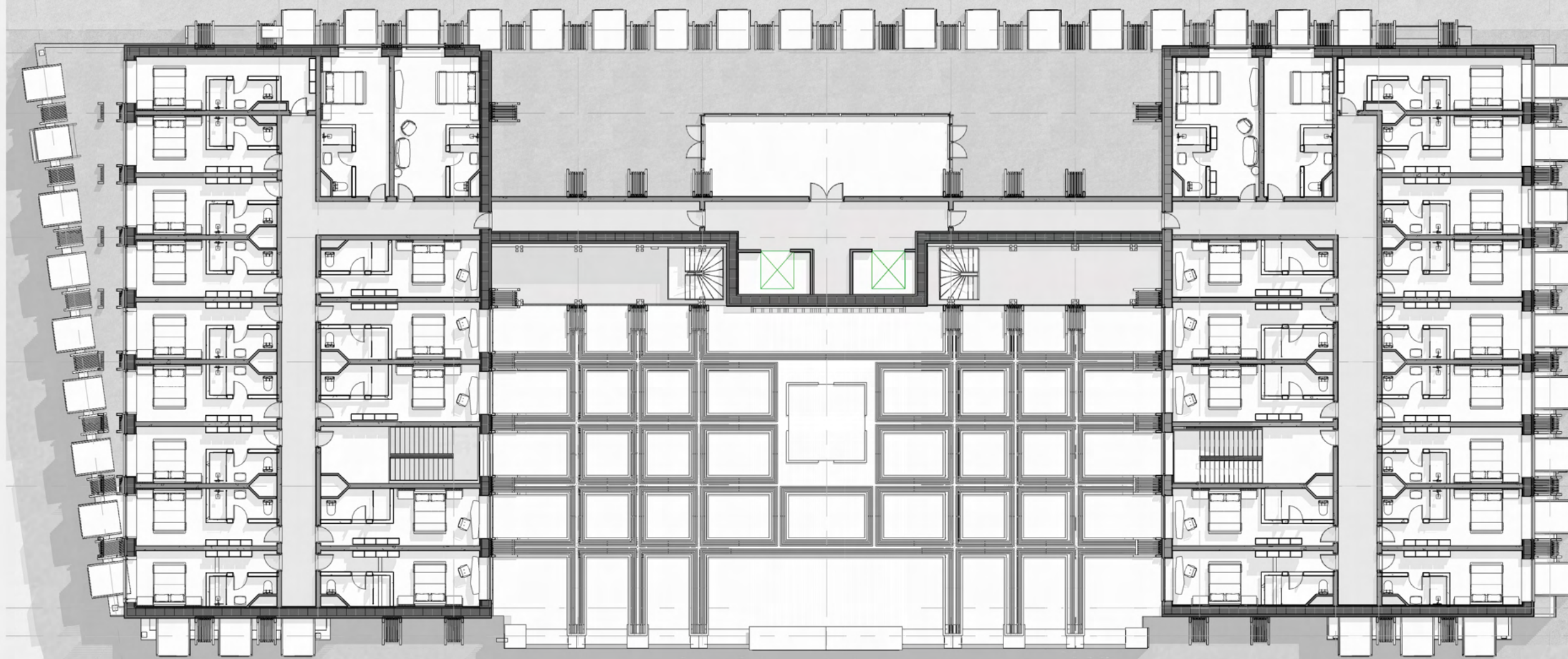
TYPICAL BEDROOM — 28

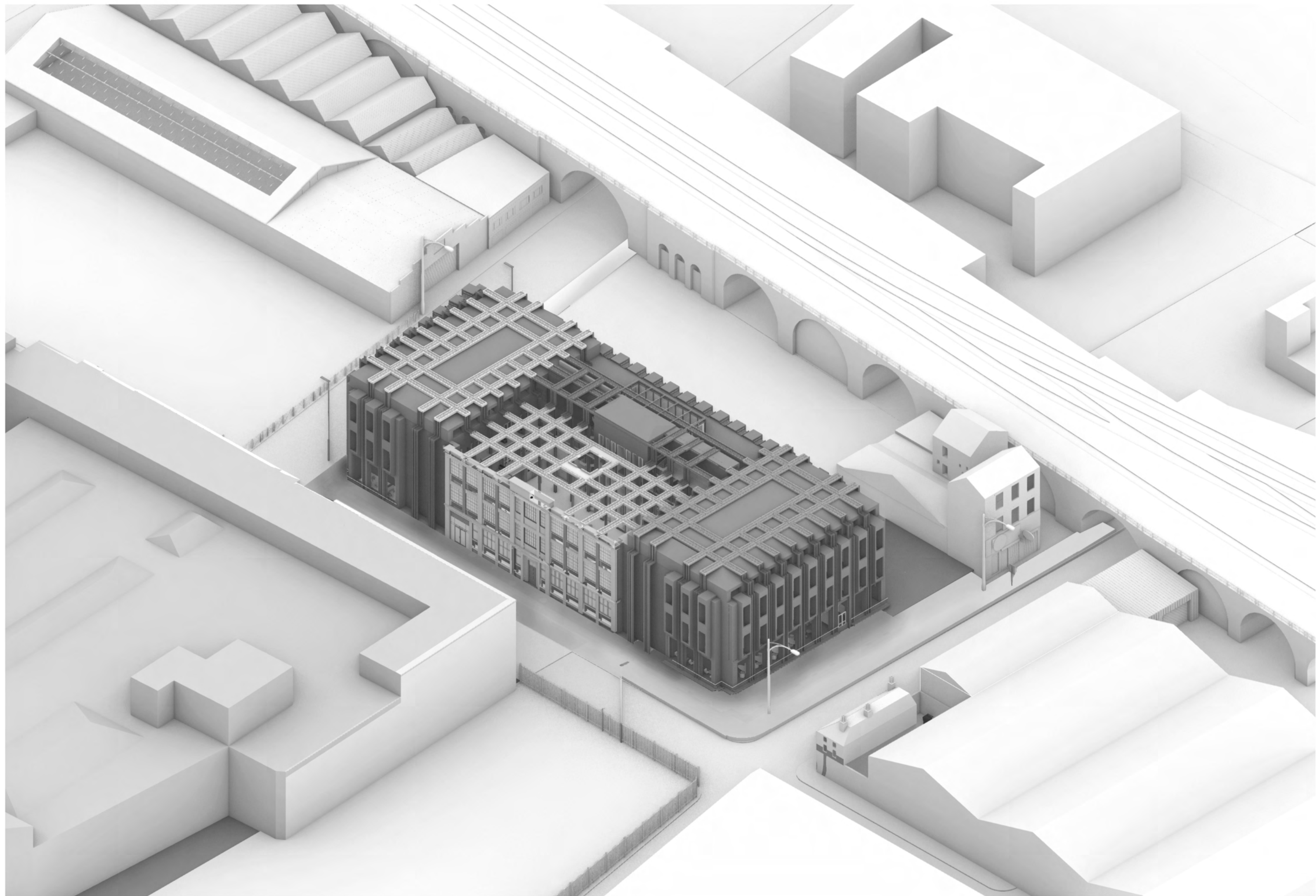
DDA ROOM — 2

SUITE — 2

TOTAL — 32

FULL TOTAL - 120





Roof
18000

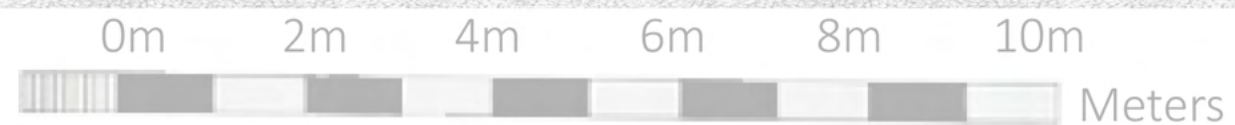
Level 3 - Roof Floor
15000

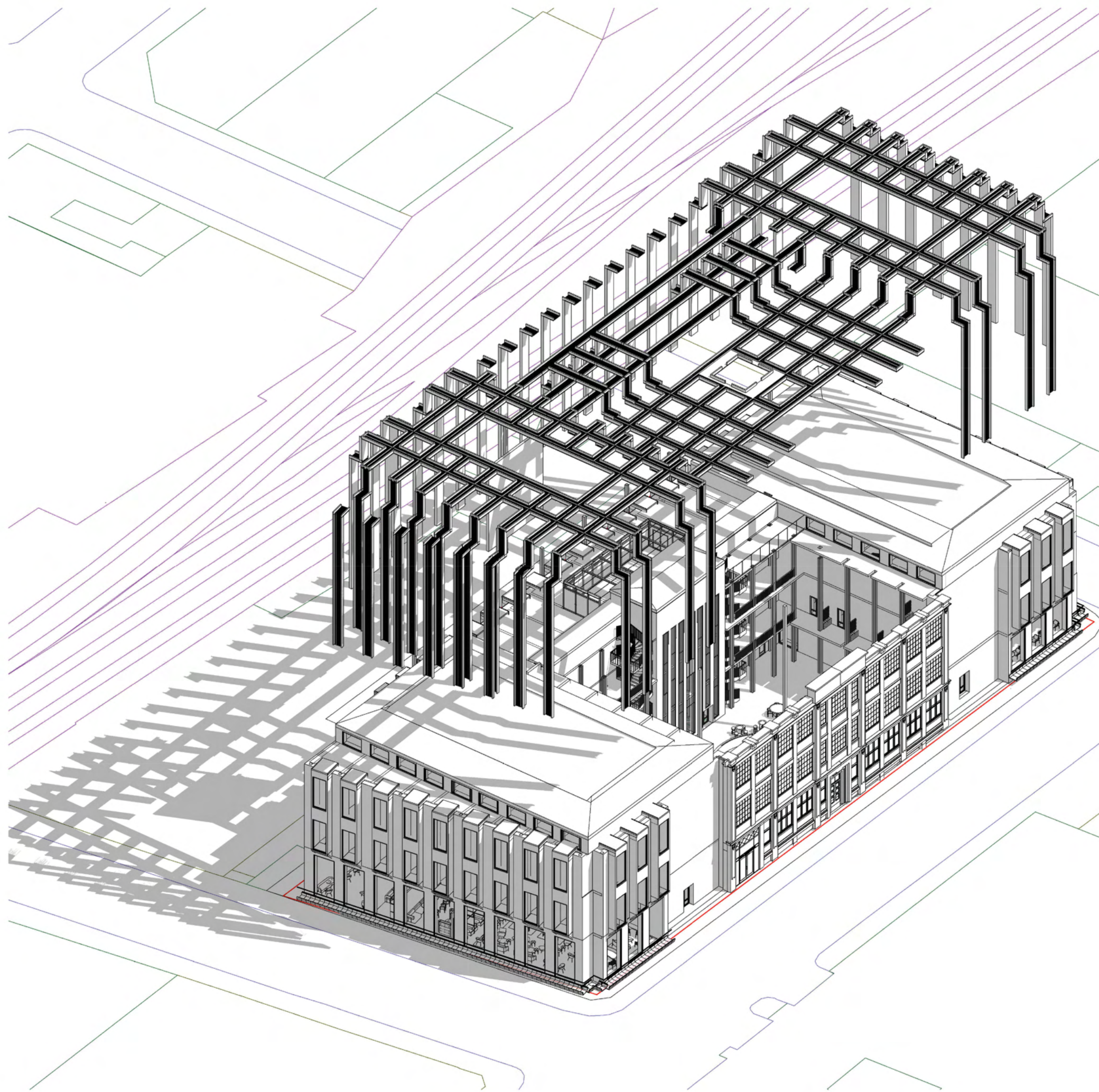
Level 2 - Second Floor
10400

Level 1 - First Floor
5500

Level 0 - Ground
0

Basement
-2400





Rainfall is captured across the façade and roof surfaces and directed through **integrated channels** within the architectural structure

The façade is adapted into a performative envelope, utilising the climate for **greywater systems**. This system manages watering of both local and new vegetation, revitalising the local biodiversity.

Rainwater harvest

576,000L

annually

Reduce potable water demand

30–60%

depending on seasonal occupancy

Reduce storm water runoff

80%

acting as an active water management system

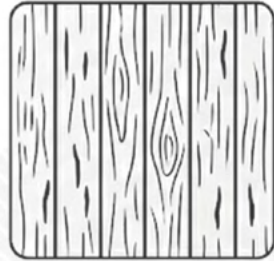
Increased Biodiversity

Maximizes local ecological value, provides internal micro-climate cooling, and establishes local food production via an atrium tree, hydroponic cultivation, and exterior aquatic planters.



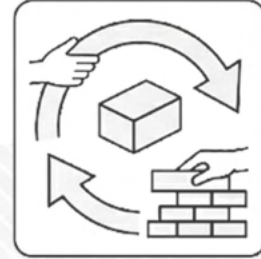
Shou Sugi Ban Wood

Surface-charred exterior wood cladding for natural resistance to insects, rot, and weathering without the need for toxic, synthetic chemical sealants or ongoing maintenance coatings



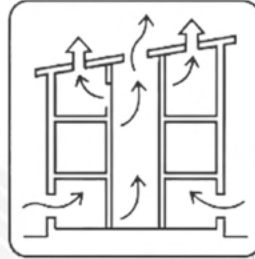
Material Reuse

Drastically reduces upfront embodied carbon (A1 - A3 life cycle stages) by diverting salvaged materials from landfills and bypassing raw extraction emissions



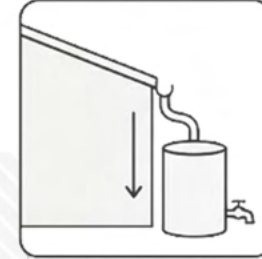
Stack Effect Ventilation

Eliminates mechanical HVAC cooling loads by using thermal buoyancy to draw cool air through the facade and exhaust stale, warm air out of the central atrium



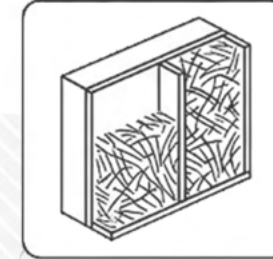
Rainwater Harvesting

Lowers utility mains demand and mitigates site storm-water surges by capturing and utilizing gravity-fed runoff for on-site irrigation



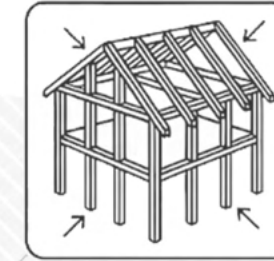
Straw Insulation

Utilising low-energy agricultural waste that provides a highly insulative, breathable thermal barrier, lowers the project's overall carbon footprint



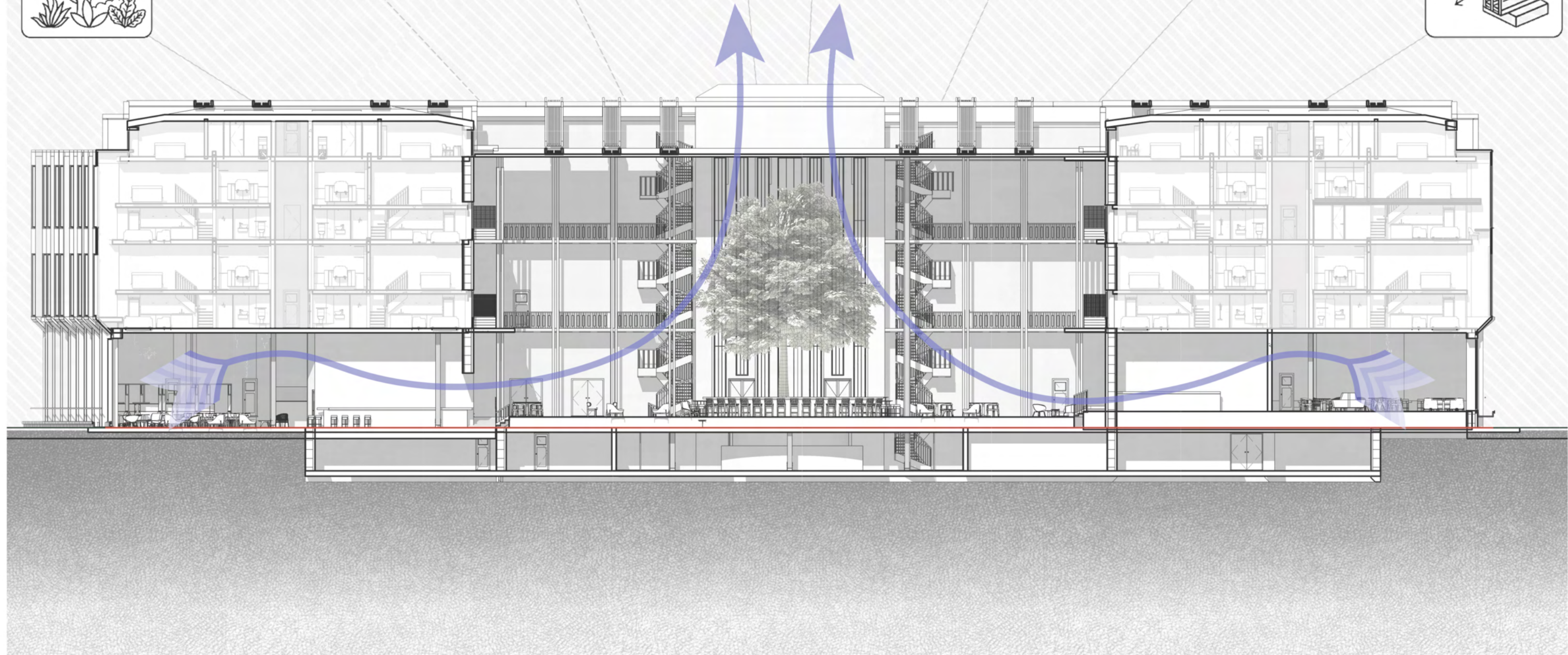
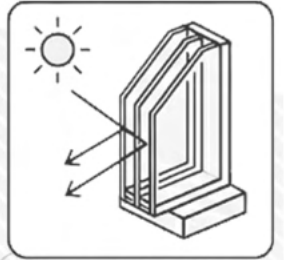
Timber Frame Construction

Offsets high-emission structural materials like concrete or steel by permanently sequestering atmospheric CO2 within the building fabric



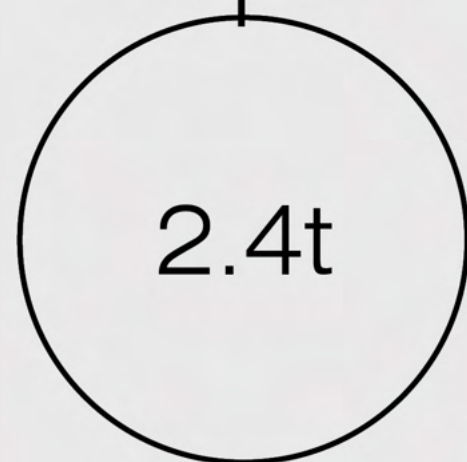
Triple Glazed Windows

Maximizes thermal envelope efficiency and eliminates perimeter drafts to lower operational heating demands

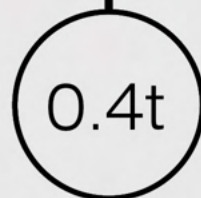




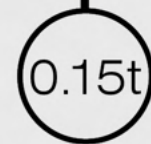
Reclaimable Materials



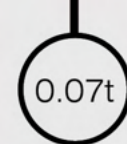
Industrial Steel -
HS2 Site



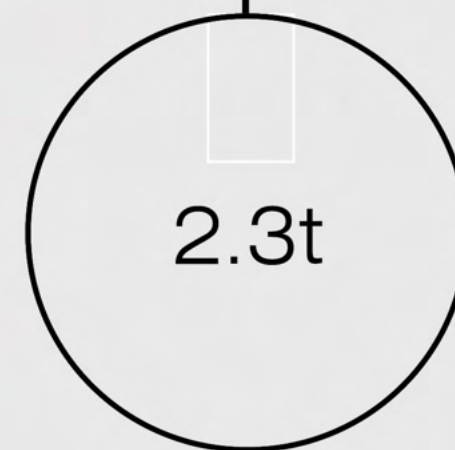
Wood Sleepers -
Existing Railway



**Brick ma-
sonry** -
BBC

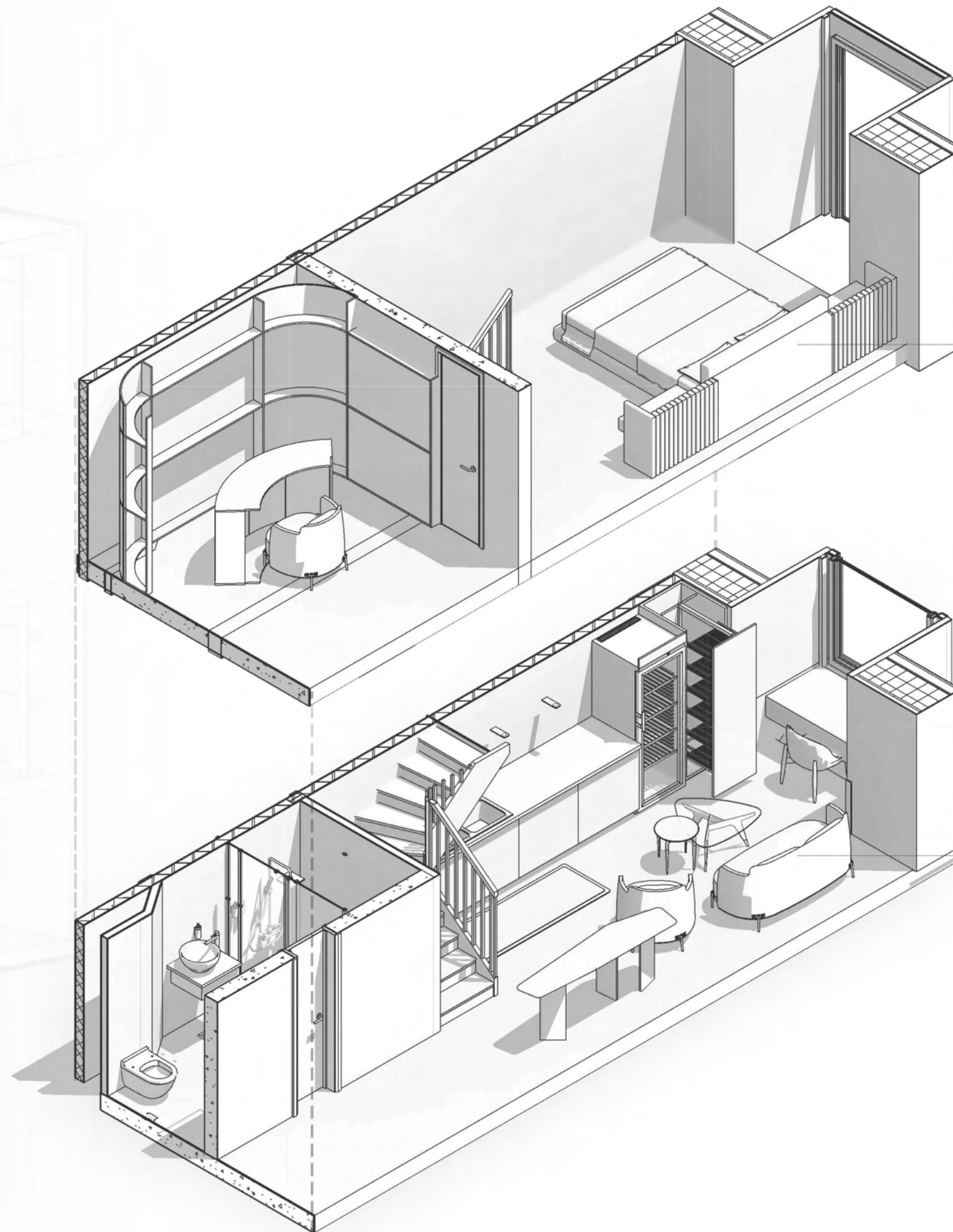


Bentonite Clay
- HS2 Site



Corten Steel
- Duddeston Viaduct

CO2e saved per tonne reused



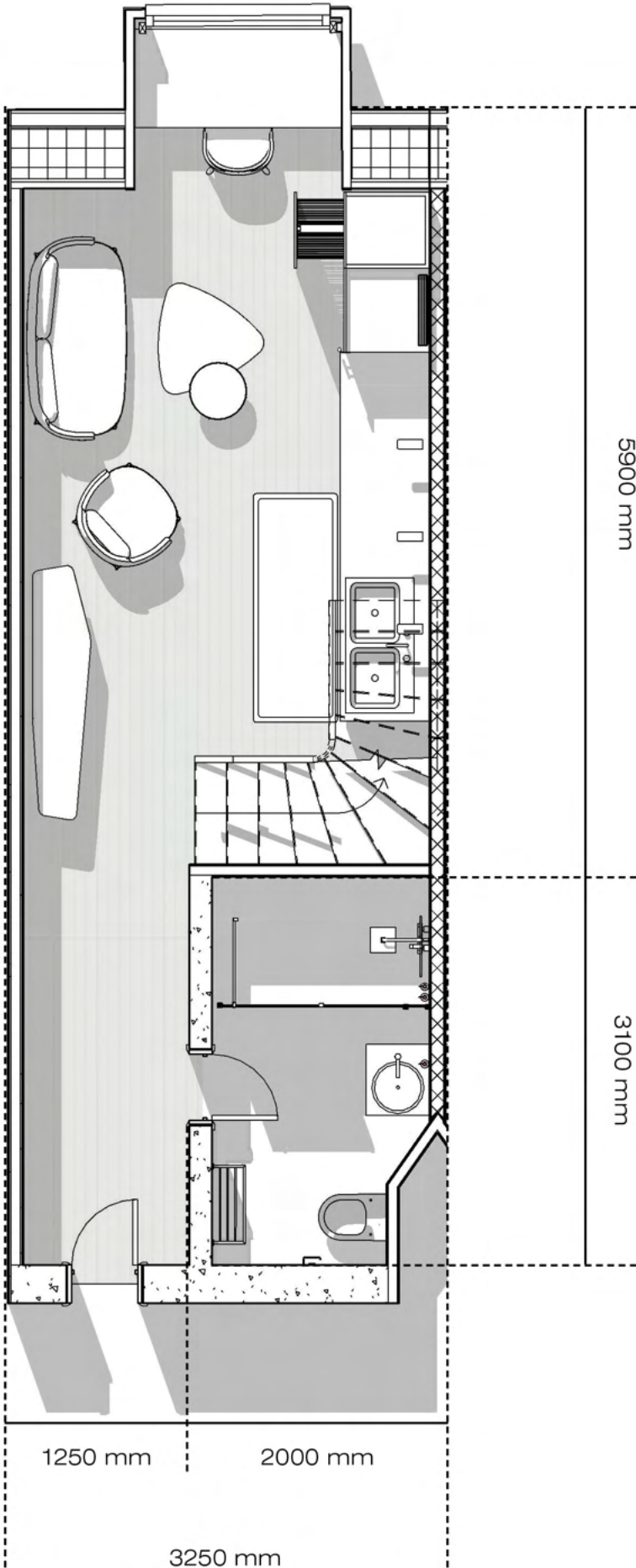
Upper Level - (2900)

Lower Level - (0.00)

Bedroom Plan

1:50 @A3

Lower Level



Upper Level

