Alfreton Park Community SEND School

Alfreton, Derbyshire





Winner AJ Awards 2023 School Project



Winner of Civic Trust Special Award for Education



Winner of Civic Trust Awards 2024

Winner of the RIBA East Midlands Awards 2024

Winner of the RIBA East Midlands Building of the Year Awards 2024

RIBA # | EAST MIDLANDS PROJECT ARCHITECT OF THE YEAR 2024

Winner of the RIBA East Midlands Project Architect of the Year Awards 2024

Winner of the RIBA East Midlands Client of the Year Awards 2024



Winner of the RIBA National Awards 2024













Inspiring Learning Spaces at the Education Estates Awards 2024 Project of the Year - Inclusive Design at the Education Estates Awards 2024 Project of the Year - Schools at the Education Estates Awards 2024

Delivering Social Value Award at the Building Awards 2024



Nominated for the ArchDaily Building of the Year 2024



Graphisoft UK Awards Runner up in the Public Sector Project of the Year



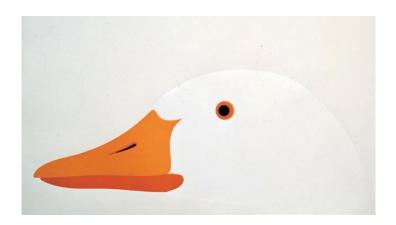
'No house should ever be on a hill or on anything. It should be of the hill. Belonging to it. Hill and house should live together each the happier for the other.'

Frank Lloyd Wright, discussing Taliesin House













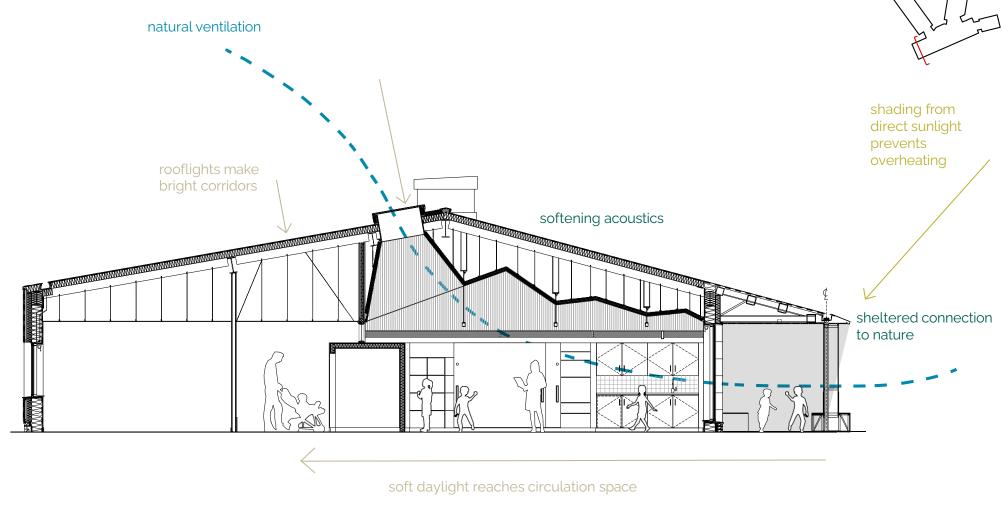




1. Nursery classroom 2. Primary classroom 3. Secondary classroom 4. Post-16 classroom 5. Practical room 6. Music and drama 7. Food technology 8. Art room 9. Trampoline room 10. Soft play 11. Sensory room 12. Physiotherapy 13. Therapy room 14. Medical room 15. Small group room 16. Library 17. Social skills base 18. Social recreation post-16 19. Dining 20. Hall 21. Staff office/prep 22. Staff room 23. Meeting/training room 24. Parent's room 25. Interview room 26. Changing room 27. Pupil hygiene room 28. Laundry 29. Kitchen 30. Plant 31. Store 32. Main Entrance 33. Pupil Access 34. Community Access



Fresh air ventilation and daylight through the section



small group room circulation mobility store classroom outdoor learning







Central Foundation Boys' School

Education Estates Conference 2025

Hawkins\ Brown



Introduction

Wider Experience















- Workplace
- Residential
- Infrastructure
- Cultural & Civic
- Healthcare

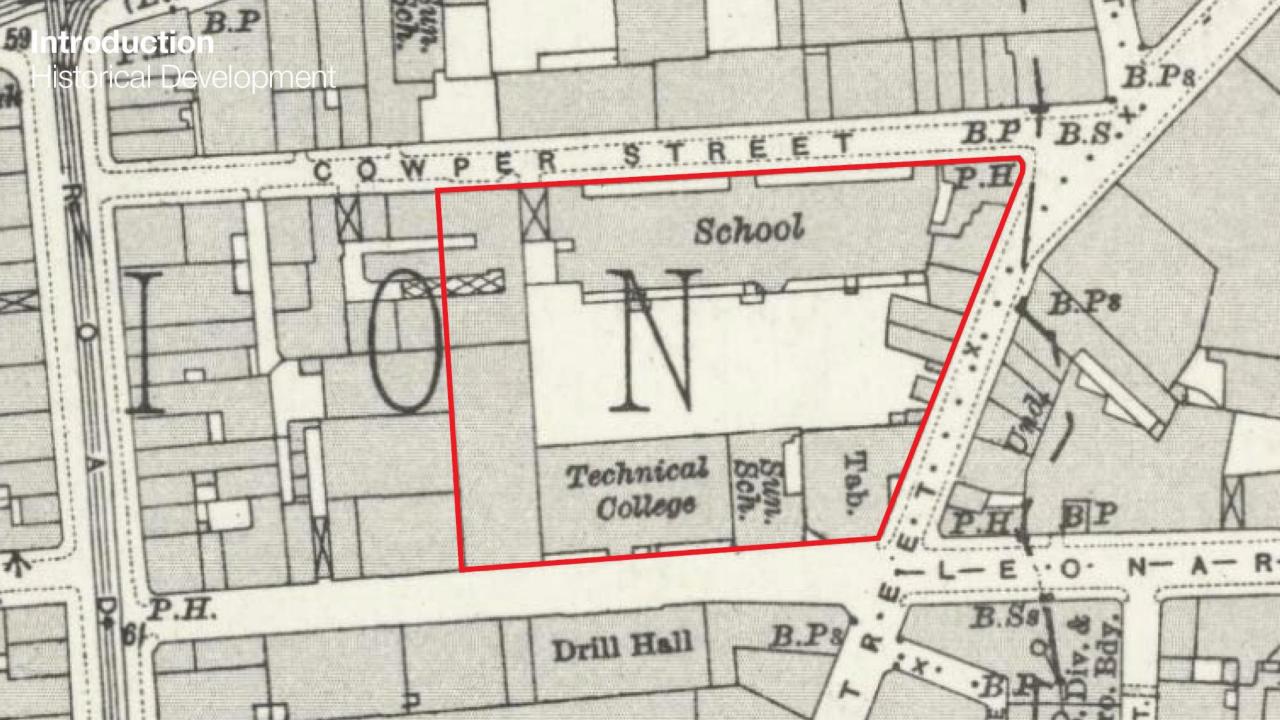


Project Vision

- Build a bigger and better school for future generations on the site
- Breathe new life into old buildings
- Provide new specialist facilities to address the School's needs
- ► Improve accessibility across the whole site
- ► Address a shortfall in funding for the project





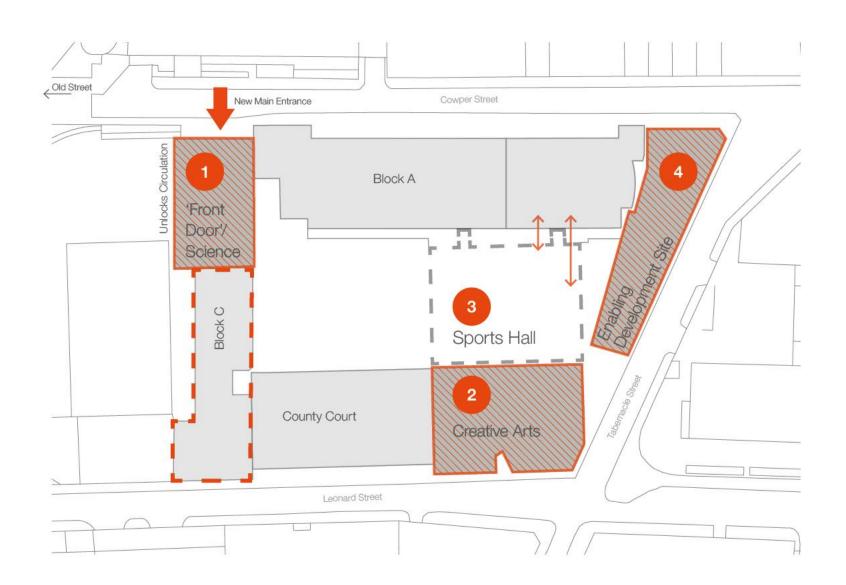




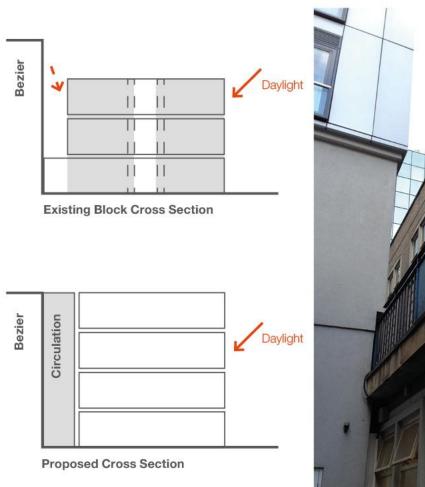
Masterplan

Overview

- New Science Block
 Purpose-built heavily serviced spaces for science. Ground floor provides new 'front door'.
- 2 Creative Arts Block
 The existing Tabernacle makes fantastic space for Creative Arts.
- Sports Hall in Courtyard
 Substantially sunken, with ancillary spaces provided in the basement of Block A.
- 4 Enabling Development Site
 Cross funding development comprising of eight storeys of commercial accommodation.



Existing Block B









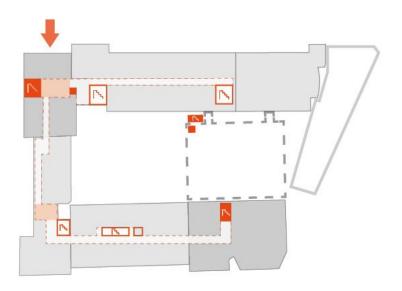


ExistingBlock C

level changes across the building

PSBP2

Amongst school buildings 'in the very worst condition'











ExistingTabernacle

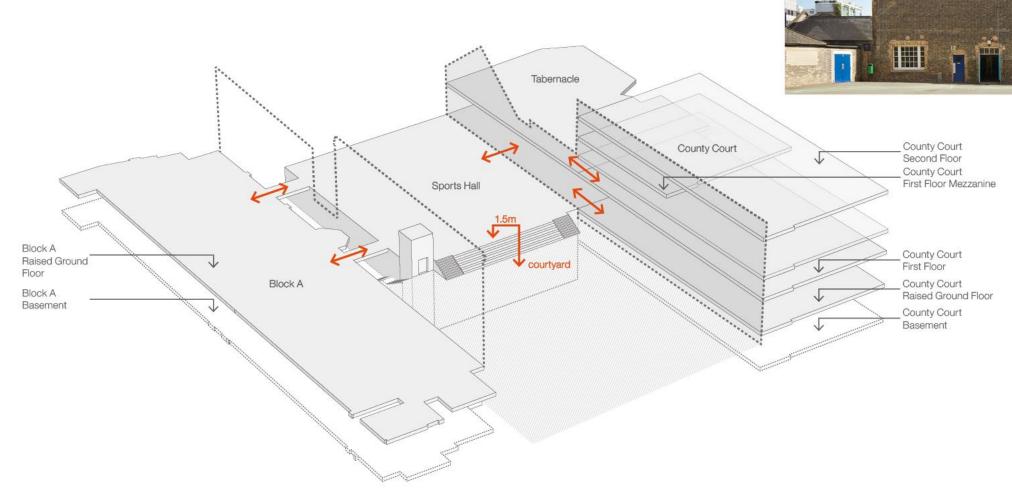








AccessibilitySports Hall and Courtyard













Enabling DevelopmentCross Funding





Long-term Partnership Inclusivity Research









Function

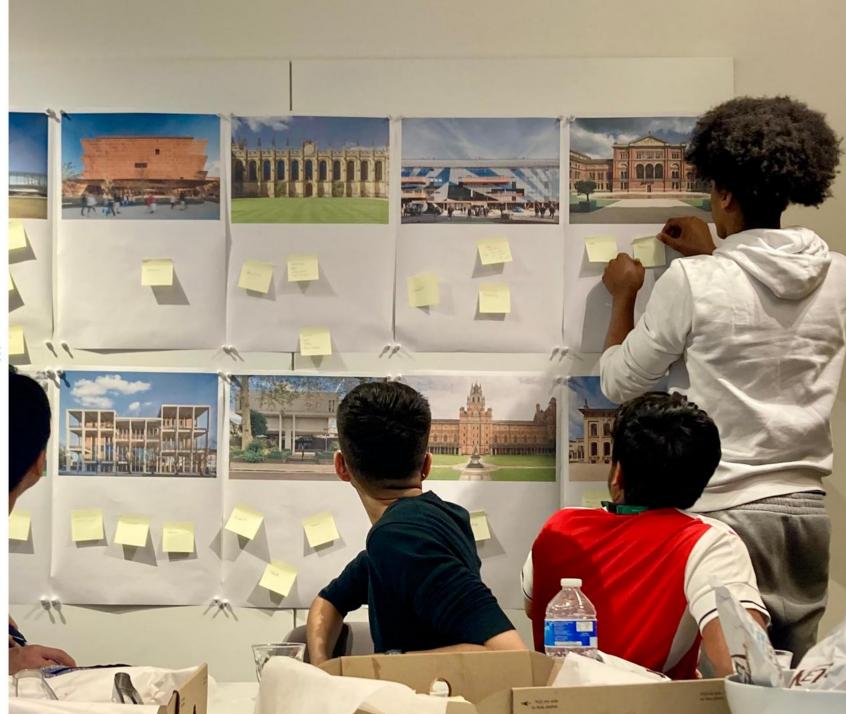
Comfort

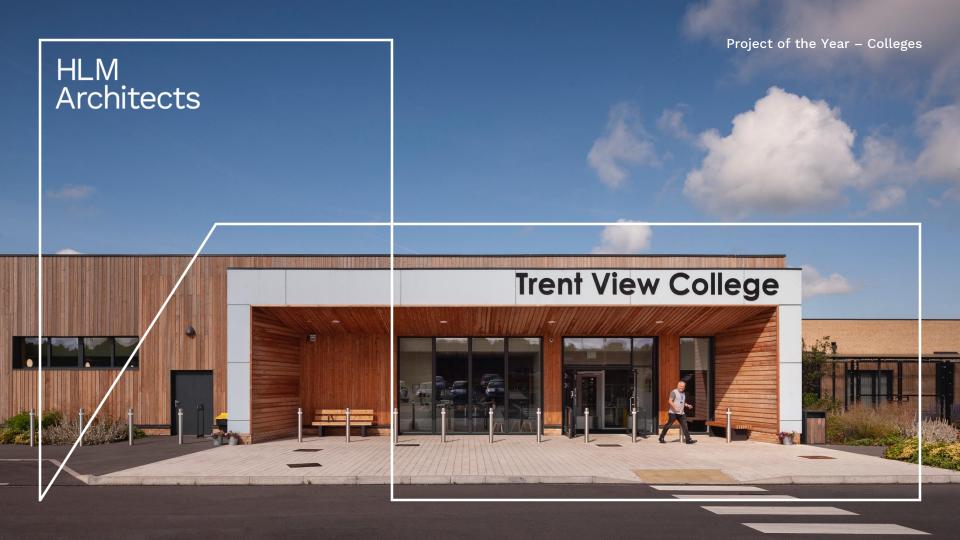




Survey

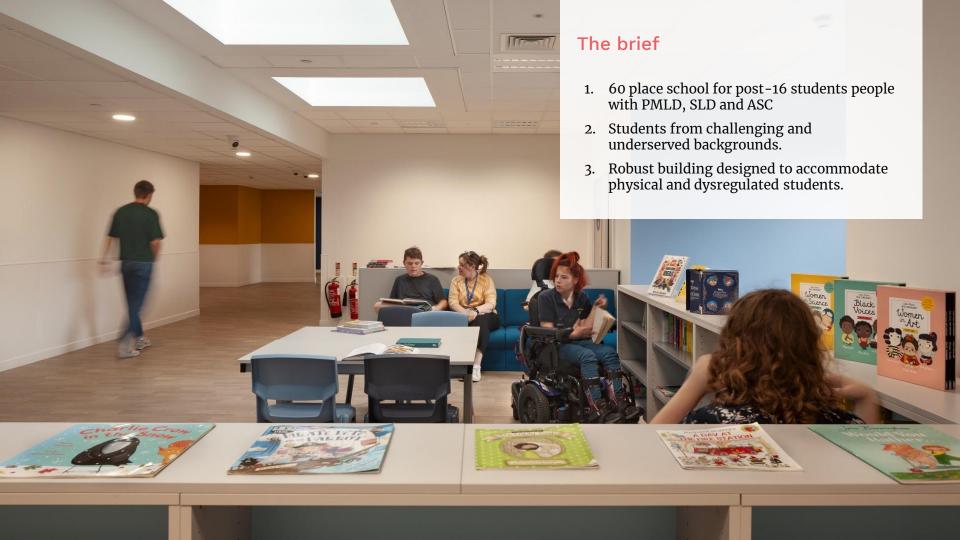
Focus Groups













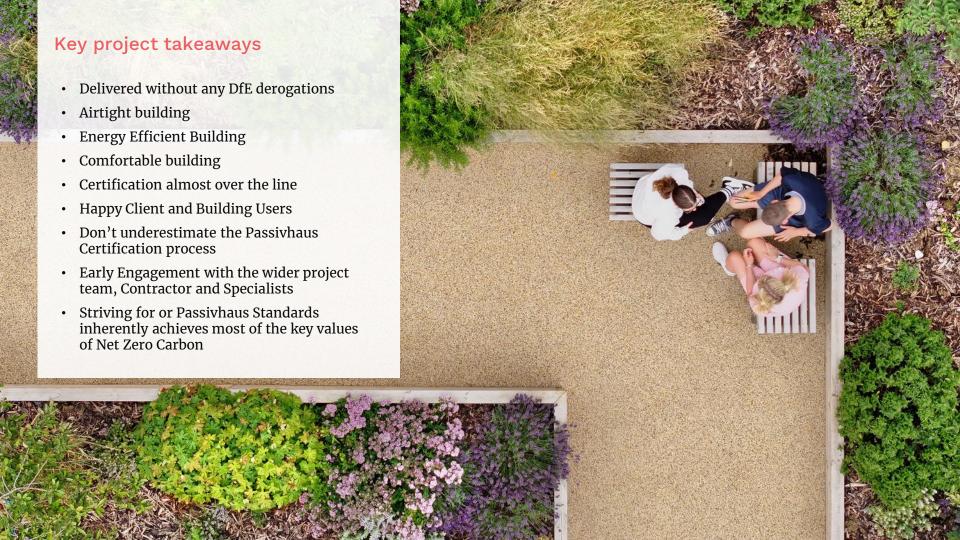












"We have this amazing new building and talented team in place to provide a nurturing space where our students can acquire vital life skills, engage in meaningful work and develop their routes toward independence. It will be life changing for the students attending.".

Sarah Parker, Principal at Trent View College

"The innovation and ambition behind this project has set the standard for what SEND schools can, and should, be. I look forward to watching the impact of Trent View College on its students and the Scunthorpe community over the coming months and years.."

Mark Wilson, CEO at Wellspring Academy Trust





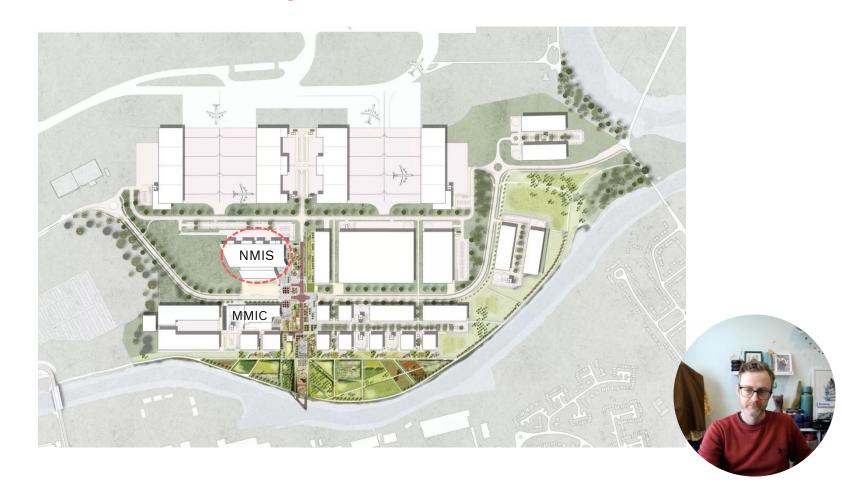


"The National Manufacturing Institute Scotland is an industry-led international centre of manufacturing expertise where research, industry and the public sector work together to transform skills, productivity and innovation to attract investment and make Scotland a global leader in advanced manufacturing."

Scottish Government



Advanced Manufacturing Innovation District Scotland (AMIDS)



3 components to the project:

Four interconnected zones:



1. Digital Factory 2050

"Digital Factory 2050 will be a beacon for the regeneration of manufacturing."



2. Innovation Collaboratory

"The innovation collaboratory will be a HUB for innovation in design and manufacture – an incubator for new tech-based."



3. Manufacturing Skills Academy

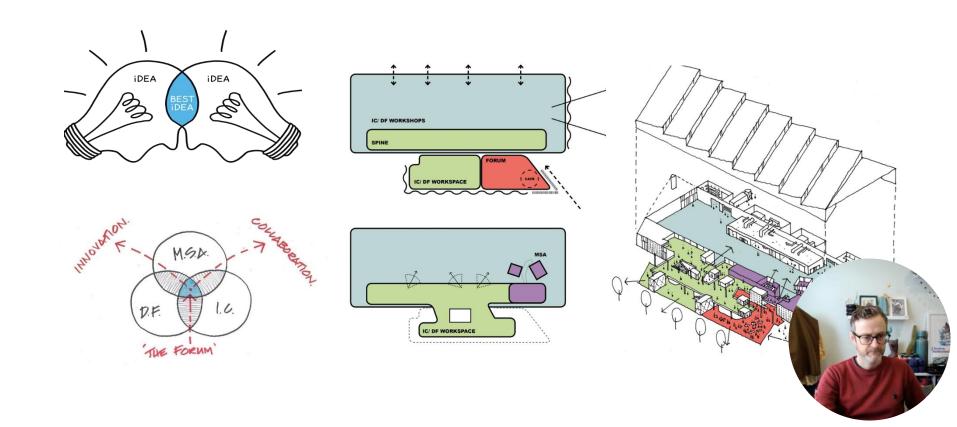
"The manufacturing Skills Academy will support SAMRA – a Scotland-wide collaboration in skills and talent development for advanced manufacturing technologies."



The Forum

"The forum area is the gateway for tenants and the wider innov community to

This facility is about creating an open and collaborative environment where knowledge and creativity can be shared



Creating a "Sense of Place"

A Research Campus with a unique character and identity – experimentation and innovation on show within a landscaped setting adjacent to a major international airport.





86.9%	BREEAM Outstanding Rating
EPC A+	-5.86kgCO2/m²/a
1.56	Low form factor
1500m ²	Green roof, SUDS/rain gardens
50m ²	Internal green wall, tree planting

103 kWh/m²	EUI (no PV offset)based on TM54 assessment
64 kWh/m²	EUI (current PV offset) based on TM54 assessment
41 kWh/m²	EUI (with full PV offset) based on TM54 assessment



14 kWh/m2/a Heating/cooling demand Rooftop PV with a further 1,600 (521kW) 340kW designed and funded Pre-manufactured value 57% (in line with RIBA methodology) Carbon reduction through 700T+ use of glulam and CLT 'Up front' embodied carbon 843 kgC02/m2 Embodied Carbon/ 1.048 kgC02/m2 Whole Life Carbon Based on A1-A5, B1-B5 and C1-C4 / stage 4 design calculation

<55 kWh/m2/a

RIBA 2030 and LETI Net Zero Operational Energy Metrics

Including PV offset, target for office/ non-domestic buildings regulated and non-regulated energy based on TM54 and client installed equipment.

100,000 L

Low water usage, low flow fittings

431,531 kWh/a

391,335 kg cO2/a

1,388,796 kWh/a

Gross Operational Energy

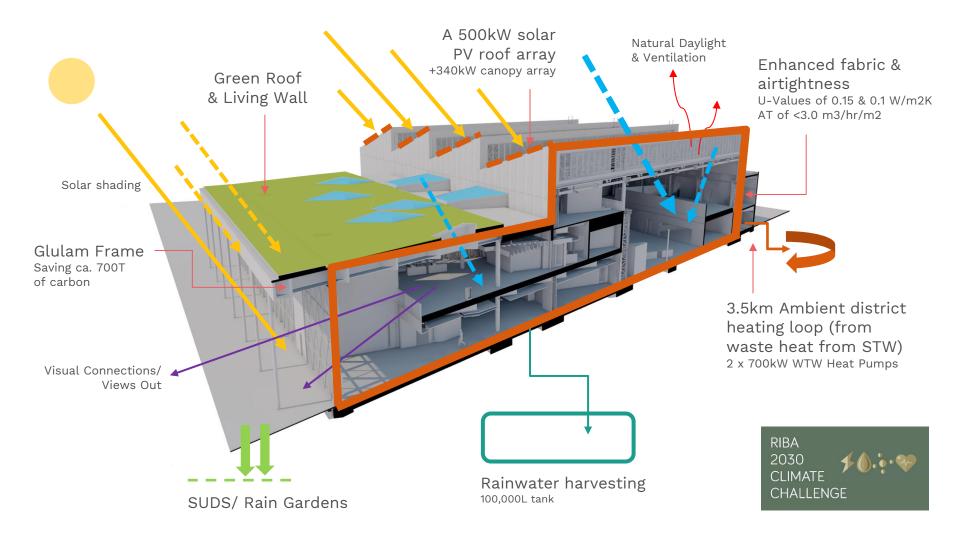
Including client installed equipment, based on TM54 assessment

837,829 kWh/a

Full PV Yield (once all designed PV commissioned)

Based on 4,845m2/ 2,603 panels (JA Solar JAM60S20-380/MR)

Net Zero Regulated Energy



Key Facts

Standardisation

Grids | Digital factory modules | cladding modules

Repetition

Building form | Structural frame | modular elements

Modularisation

Meeting rooms | teaching pods

Offsite Fabrication

Meeting rooms | Project pods | MSA teaching pods | Glulam diagrid | CLT Roof | M&E Services

Designing to Material Dimensions

Cladding panels | Glazed panels



- 1. Pre-manufacturing 3D Primary Structural
- 2. Pre-manufacturing 2D Primary Structural
- 3. Pre-manufacturing components non-systemised primary structure
- 4. -
- 5. Pre-manufacturing non-structural assemblies/sub- assemblies
- 6. Traditional building product-led site labour reduction/ productivity improvements
- 7. Site process-led labour reduction/productivity/ assurance improvements

Sustainability Outcomes:

- University's First Carbon Neutral/ Net Zero (Regulated) Energy Building
- BREEAM Outstanding
- RIBA Sustainable Outcomes









Outcomes:

- Exceeded expectations
- Helped deliver more than 150 research & development projects for 142 different customers and partners
- Upskilled & reskilled more than 1,300 people
- 80 graduate trainees in Scottish manufacturing
- Supported more than 100 internships

"This flagship facility – which has sustainability at its heart – is a unique part of Scotland's manufacturing innovation ecosystem. It will play a leading role in developing advanced manufacturing, industry 4.0 capability and cross-sectoral research and innovation activity in Scotland, the UK and beyond."

Professor Sir Jim McDonald, Principal & Vice-Chancellor of the University of Strathclyde, & Chair of NMIS Board









