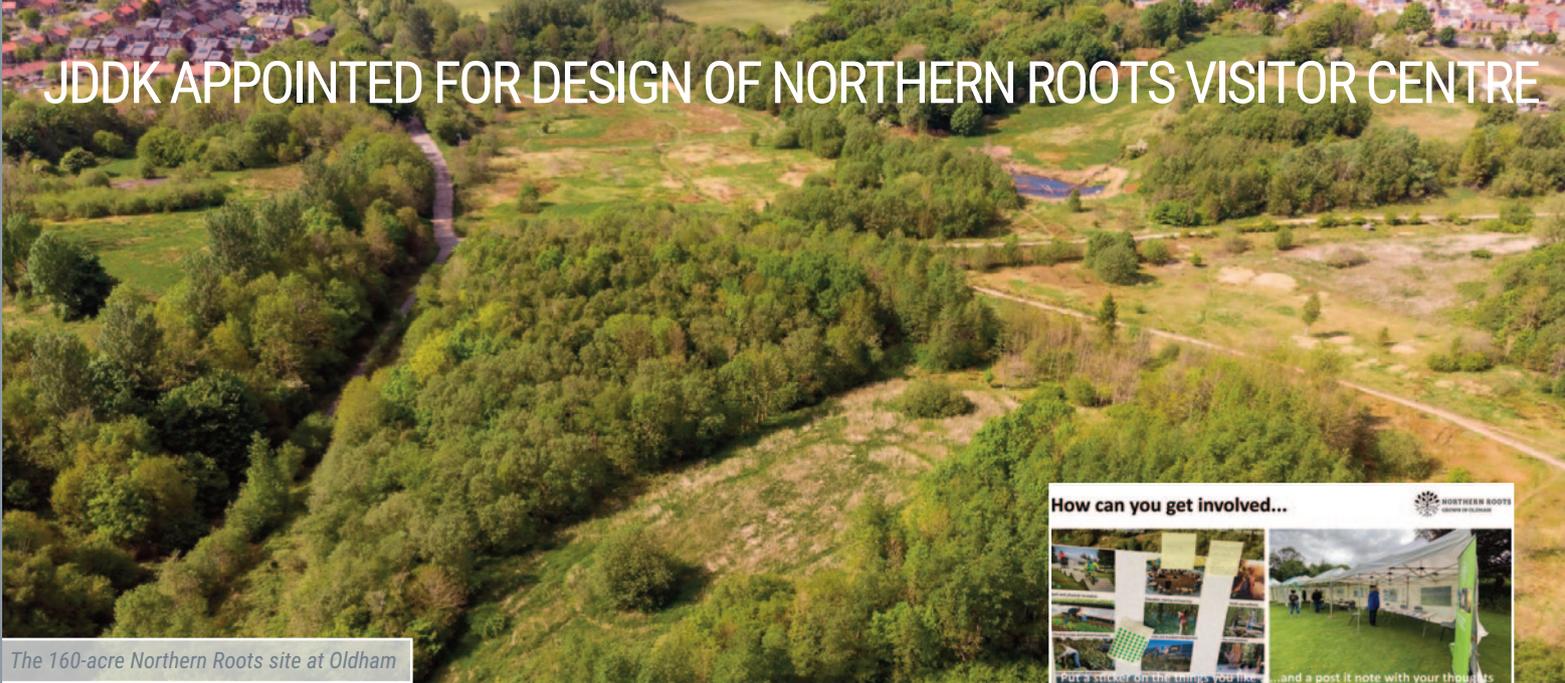


# MILLMOUNT NEWS AUTUMN 2021



NEW LIFE FOR OLD SCHOOL

# JDDK APPOINTED FOR DESIGN OF NORTHERN ROOTS VISITOR CENTRE



The 160-acre Northern Roots site at Oldham

We are delighted to have been appointed by Northern Roots to design the proposed Visitor and Learning Centres on the 160-acre Northern Roots site in Oldham, Greater Manchester.

The Northern Roots project aims to create the UK's largest urban farm and country park on 160-acres of under-used green space, five minutes from Oldham town centre, Greater Manchester. Developed for and with local communities, the vision for Northern Roots is to create sustainable economic, social and environmental benefits for those communities by developing new facilities and activities, creating jobs and business opportunities,



Alison and students from Oldham College

stimulating the local economy and attracting increased visitor numbers, improving the health of the local residents and enhancing the habitat, biodiversity and environmental value of the 160-acre Northern Roots site.

Cllr Abdul Jabbar, Deputy Leader Oldham Council and Chairman, Northern Roots Board, said, "We're really pleased to welcome JDDK to the Northern Roots team. It's taken three years of hard work to bring the project to this stage, so this is a pivotal moment in turning our exciting vision for Northern Roots into a reality. A vision that will bring economic benefits to local communities in the form of jobs and business opportunities and help us play our part in delivering a more sustainable future for Oldham."

In early October we undertook the first of our Community Consultations with JDDK Principal Architect, Alison Thornton-Sykes, on hand with boards illustrating different types of building and a landscape model of the site to listen to the views of students from Oldham College and young people from Mahdlo Youth Zone.

They shared ideas for how they'd like the buildings to look, the materials they could be constructed with, and how the buildings could be designed to be sustainable and use green



How can you get involved...

Put a sticker on the things you like... and a post it note with your thoughts

Join us in the model making area

Get involved in the construction...

A Community Consultation board

technologies like solar power.

We and Northern Roots will be sharing our initial design ideas, developed as a result of this early stage engagement, during further consultation events during the autumn so that we gain feedback from the community.

This will then inform the final proposals that will form part of the planning application for the site, which is due to be submitted next year.

Funding for the project has been guaranteed by the Government's Towns Fund, which awarded Oldham £24.4m for four projects, the Rural Community Energy Fund, the DEFRA-funded Green Recovery Challenge Fund, GM Moving and the Esmee Fairbairn Foundation.

## ACCESSIBLE BUNGALOWS FOR WALKER

The Repairs & Construction Services department of Your Homes Newcastle, with WB Construction acting as principal sub-contractor, has begun building work on the site of a former residential home in the East End of Newcastle to provide six, one and two bedroom bungalows which have been designed specifically for wheelchair access.

Originally constructed in the 1970's but deemed no longer fit for purpose, Eastbourne Court in Walker was demolished last year and will be replaced by three separate blocks, two of which will consist of four semi-detached one bedroom homes, with the

other designed as two, two bedroom semi-detached homes.

Lynn Waters, Regeneration Manager at Your Homes Newcastle, commented, "The homes at Eastbourne Mews have been designed and will be built to level access standards and are accessible and adaptable in order support our clients with mobility needs.

"By taking this approach the properties will be able to meet the needs of vulnerable clients and minimise the need for adaptations by providing

An aerial impression of the development



properties that take a longer term approach to meeting client health needs and reducing potential adaptation costs as a result."

# REDEVELOPMENT SCHEME OFFERS NEW LIFE FOR OLD SCHOOL



In September, Sunderland City Council granted Planning Permission for our innovative redevelopment scheme in Washington to convert a disused C19th school into a residential scheme for 15 one bedroom apartments for supported living.

Originally known as Biddick School, the Old School on Albert Place Washington, was built in 1893 with the school closing in 1993 after which the building temporarily housed the Washington Church of Christ before being left vacant. The redevelopment proposal, on behalf of Sunderland City Council, is designed to provide a safe environment for residents who are transitioning to independent living but may still need some level of support and is part of a wider plan by the Council to deliver more homes for affordable rent that meet the needs of vulnerable residents.

15 of the apartments are designed for medium to long term accommodation and to provide a vital sense of ownership for the residents. The scheme also includes overnight accommodation for support staff and communal space.

JDDK Project Architect, Oliver Hopwood,



The interior of one of the proposed apartments

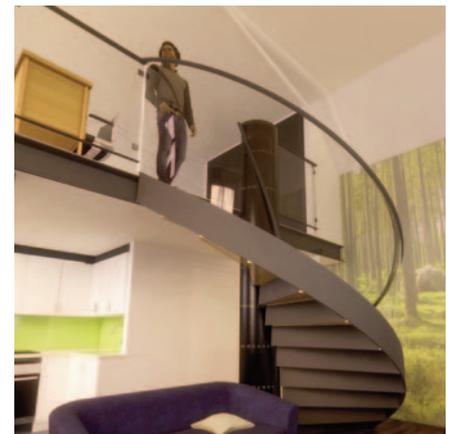
commented, "It's a really interesting scheme for us to bring new life to this great example of a Victorian school which, unfortunately, has seen better days with the onset of damp and other problems after being left vacant for so long."

"Central to our design is the formation of a landscaped courtyard which can act as a sheltered, outdoor communal space enclosed by the two new single storey extensions, each containing two apartments and scaled to appear subservient to the existing building."

"The high-ceilinged main hall and large windows of the old school have allowed us to split this into three further apartments, each with the bedroom on a new mezzanine floor accessed by a spiral staircase. Whilst most of the apartments have an open plan living room/kitchen, four have separate kitchens which are more appropriate for certain residents' needs allowing greater flexibility and suitability within the scheme for the user group."

Externally, as it is not anticipated that the residents will be car owners, limited parking is provided for staff and visitors whilst the courtyard will include a series of shared seating areas, an upper area enclosed by a circular wall and linked to the lower areas by footpaths and ramps. The soft landscaping is low maintenance planting with a mix of trees, specimen shrubs, ornamental grasses/perennials and spring bulbs providing seasonal interest whilst increasing biodiversity.

The school stands opposite five new bungalows that are currently under construction at Albert Place. The bungalows will provide accessible one-storey homes for people living with disabilities, and - as with the Old School - are being developed as part of the council's £59m Housing Delivery and Investment Plan (HDIP).



Mezzanine bedrooms are accessed by a spiral staircase, utilising the full height of the old school hall.

**Councillor Kevin Johnston, Dynamic City cabinet member at Sunderland City Council, said:**

"It's fantastic to see plans take shape for Washington Old School, which has stood empty for many years but will now be transformed into attractive new apartments that will complement the homes we're constructing directly opposite."

"Our HDIP is an important strand of the city's overall housing strategy, ensuring that vulnerable people are able to access high-quality, affordable homes for rent across Sunderland. The school will create 15 new homes that will not only add to the city's supported housing stock, but will bring to life a building that has stood unused for so long."

# JDDK CARBON FOOTPRINT

We started looking at our own carbon footprint in 2019 as part of the practice's Sustainability Strategy which was published the same year to affirm our commitment to shaping the low carbon future and empower everyone in our practice to respond positively to the climate crisis so that the business could reach net zero by 2030.

A key element of our strategy is to measure our own carbon footprint so we could reduce it.

In charge of this has been JDDK Project Architect Sam Dixon who undertook the Carbon Footprinting, Management and Reporting Course at Northumbria University. As an architectural practice, the majority of our emissions relate to our energy use in our office and business travel, but we have also chosen to include Employee Commuting within our footprint because we are able to at least influence this if not actually control it.



Sam has set up the various policies required to collect the data which include meter readings, mileage reports, business travel receipts and weekly commuting questionnaires. Using the Smart Carbon website, we record our readings which are then displayed graphically, helping us to plot our progress towards Net Zero.

The graphs below show the emissions from our baseline year and the following year which reflect changes during Covid.

Now we have our benchmark and the first year's results, we can work from this to reduce our Carbon Footprint through a variety of strategies on energy usage and personal travel. At a recent Away Day for staff at The Sill we engaged with colleagues on strategies to continue to reduce our carbon emissions.

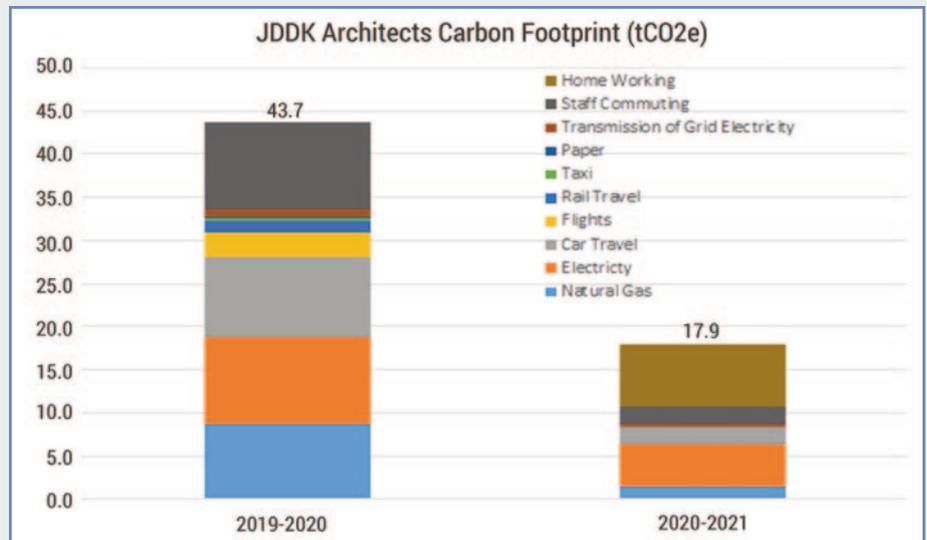


We will be moving as many meetings online as possible and are now offering free EV charging to encourage electric car use, which has already influenced two of our team to switch to fully electric cars, in addition to our already excellent facilities for cyclists. We are planning for longer term investments in the retrofit of our Millmount House offices.

In the meantime we have taken a decision to offset 100% of our existing footprint by joining

Forest Carbon and planting trees at Swinside Mill (see below).

Whilst reducing our own carbon footprint is vital as we transition towards a low carbon future, as architects we aren't overlooking the carbon emissions embodied in the buildings that we are designing. This embodied carbon is significant and we are working with our clients to reduce this through our commitment to the RIBA 2030 Climate Challenge.



## FOREST CARBON MEMBERSHIP



In our sustainability strategy, we committed to offsetting 10% of our emissions with tree planting. Now that Sam Dixon has completed our first year's calculation, we have signed up to

Forest Carbon, a local company, who organise carbon offsetting through tree planting.

We have chosen to offset 100% of our carbon footprint (18 tonnes CO<sub>2</sub>e for last year). Whilst this is no replacement for carbon reduction measures which we're still focussing on, it does go some way to mitigating the impacts of climate change, and helps with flood alleviation, rewilding, etc. Our contributions this year are supporting a

scheme at Swinside Mill in the Borders. For further information on Forest Carbon and the Swinside Mill project, please follow the link.

**For further information on Forest Carbon and the Swinside Mill project, please follow the link.**

<https://www.forestcarbon.co.uk/our-partners/carbon-club/swinside-mill>



## FLEXIBILITY THE KEY TO ST OSWALD'S FAMILY ROOM & GARDEN

We hope to have proved how a little can go a long way at St Oswald's Hospice in Gosforth, where their new Family Room & Garden has proved invaluable since opening in lockdown last year and being constantly used ever since.

With flexibility being the key to the design, the practice's 15th project at St Oswalds, since the original design by Jane Darbyshire in 1987, for the award-winning hospice, has enabled families to visit loved ones throughout the pandemic in an environment that blurs the threshold between interior and exterior space and puts families and patients at ease.

JDDK Associate Director and Project Architect, Stuart Franklin, explains, "The genius of Jane Darbyshire's original design was that the hospice could grow incrementally through the years, organically adding to the asymmetric plan and series of courtyards, as funding allowed. This Family Garden Room project is just the latest phase of an ongoing programme, which has allowed the hospice to not only grow, but also to adapt to changing needs and technology within healthcare. The building has been designed to be as flexible as possible to accommodate multiple functions; the main one allowing families to visit patients in a pleasant environment and although we obviously had no knowledge of the impending pandemic when we designed the building in 2019, it's been in constant use as a Covid-safe environment throughout."

The four month, £265,307 contract, completed by Applebridge Construction with GlenKemp as landscape architects, has doubled the size of the previous 'Quiet Room' and widened the corridors leading to it, allowing patient bed access. The new building's roof provides a 3meter overhang along two sides, creating a covered veranda. This is

complemented by two sliding-folding patio doors which fold back providing uninterrupted views and access to the garden under the shelter of the roof canopy above.

The relandscaping of the garden also plays a key part in the overall design. The aim was to adapt the garden to provide an accessible 'break-out' space for patients, families and staff, offering opportunities to walk around the pond, sit and observe the wildlife or simply meet-up and chat with loved ones.

The scale of the new garden spaces were designed to compliment the scale of the surrounding buildings and the original garden. More intimate seating areas with smaller scale art works/lighting features are provided, with the garden being subdivided into subtle character areas to offer various levels of seclusion, privacy and opportunities for social interaction, highlighted by differing ground finishes. Mown paths are also formed within the wildflower lawn.

Stuart Franklin continued, "Bed-bound patients can access the garden and the family room and have the choice of meeting within a fully contained internal space, or sheltered external veranda environment, allowing maximum use of the room whatever the weather, throughout the year. During the various lockdowns, visitors were able to enter the garden without having to go through the main hospice, to see and talk to their relatives in a Covid-

safe environment. Just by adding a relatively small incremental extension, the hospice now has multiple options for visiting families."

Marisa Woodward, St Oswald's Social Worker added, "The new room has been an absolute godsend to both patients and visitors during the pandemic, allowing us to permit Covid-safe family visits when most other care and residential facilities were unable to do so, and the beneficial effect on everyone has been wonderful. The entry through the wonderful landscaped gardens rather than the hospice itself puts visitors at ease and we have had incredible feedback on the project."

**Jane Hamblin, Facilities Manager at St Oswald's, added,**

*"The transformation has been amazing. In truth, the previous quiet room was a little underused and we now have a fantastic and very much appreciated addition to our facilities for what was a relatively modest budget. Stuart and the whole team were able to deliver this under the very difficult circumstances as Covid swept the country and the response from patients, families and staff has been overwhelmingly positive – the new room is light and airy with a well thought out design and beautiful finishing."*



# CONSERVATION RESEARCH FACILITATES REFURBISHMENT OF LISTED HOSTEL

The rear of Elliott House before and after the renovation project.



A detailed investigation into the history of one of Newcastle's listed buildings, led by JDDK's Project Architect, Samantha Dixon, has helped create a successful redevelopment that supports vulnerable members of our community, enhances and secures the future heritage significance of the historic building.

Samantha, who is listed on the RIBA Conservation register, explained, "We've been involved with Bentinck Terrace since 1999 during which time JDDK have designed a number of extensions to house a reception area and additional hostel accommodation which enhanced the facility for the Changing Lives charity, helping people facing challenging times. Located on Bentinck Terrace just off Newcastle's Westgate Road, this beautiful building was actually built as a terrace of four homes around 1855 when the West End of Newcastle was home to the city's most prosperous residents – the merchants and professionals who, in essence, ran the city at that time."

The terraces were residential homes up until the 1950's when the building was taken over by the Marie Curie charity who adapted the terrace into one facility. They vacated the building in the 1990's, in fact to move into their new hospice designed by JDDK, with Changing Lives (formerly known as The Cyrenians) then taking the building to establish their first hostel for the region's homeless people.

Several projects at Elliott House for Changing Lives later, we were appointed in 2018 for the refurbishment and reconfiguration of the facility to provide 36 one-bedroom self-contained units, in a move away from hostel accommodation

At the start of the design process in order to sensitively plan the redevelopment it was vital that we had a good understanding of the history of the building and the relative significances of aspects of its fabric and layout. Samantha continued "Internally, we kept work to the original fabric to a minimum, removing relatively recent partitions and interventions that have restored the proportions of the original rooms and allowed ornate plaster ceilings and decorative features to be restored. The new layout closed up many of the openings in the original party walls which allows the four original terrace houses to be read on plan once again."

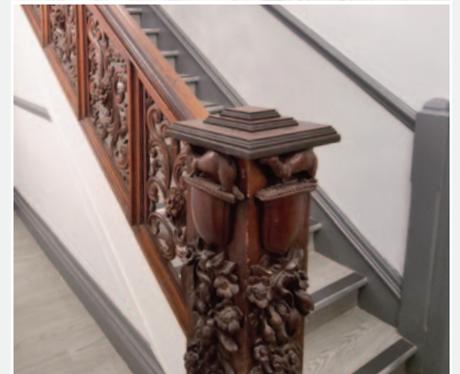
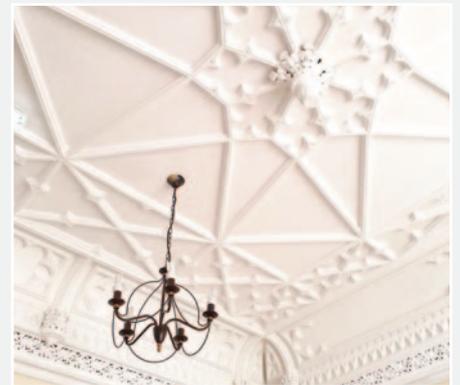
Externally, a large poor quality single storey extension has been demolished, allowing the original terrace of four houses to become visually distinct, as they had been when first built. The north gable of the original terrace has been restored and the extension has been replaced by a single storey terrace of 5 one-bedroom apartments, set at the lower garden level and conceived as a structure within a walled garden, so that from Bentinck Road the

Newcastle City Planning Officer, Colin Rising, commented,

*"The development has sensitively repurposed and revitalised the listed buildings and was based on a clear understanding and appreciation of what contributes to their special architectural and historic interest. The applicant and their design team worked closely with Planning Officers throughout the pre-application and planning application processes and through such collaborative working, the scheme has succeeded in preserving and, in a number of instances, better revealing the significance of the listed building while creating modern living spaces, including sensitively designed new build accommodation in the garden."*

appearance is of a garden wall subservient to the historic terrace.

"Throughout the process we worked closely with Newcastle City Council's planning and conservation officers, who were integral to the design process. Working collaboratively with the conservation officer allowed us to develop a proposal that not only satisfied the requirements of the client, but also one that respects the historical value of the building and its setting and allowed the planning process to run smoothly"



The project has retained interior details wherever possible such as the superb carved oak staircase and plaster ceilings



## PLANNING PERMISSION FOR RETIRED LIVING APARTMENTS IN PONTELAND

Northumberland County Council have granted planning permission to Karbon Homes for the construction of 34 high quality apartments designed specifically for older residents at Athol House on Callerton Lane in Ponteland.

Our design for the new £4m mixed tenure building will replace the existing Athol House and occupies a similar footprint but is elevated slightly above the current ground floor level to ensure flood safety, given the proximity of the River Pont, and moved slightly further from neighbouring properties to ensure no loss of privacy.

The planning permission comes after an extensive period of local consultation which began in November 2018 with the local community, planners and councillors, as JDDK Director, Kevin Turnbull, explained, "Both Karbon Homes and ourselves felt it of vital importance to listen to the local community and their views on the scale and style of the new building and our plans have been adjusted accordingly on several occasions."

"The end result, however, will hopefully justify the lengthy consultation period as the new development replaces the previous style of small bedsit style flats, which no longer meet modern standards or residents' aspirations, with 34 larger homes, 6 of which are one bed designs with the remaining 26 being two bedroom designs."

Whilst the site sits just outside the Ponteland Conservation Area, the building's appearance will be very much in-keeping with the look and feel of the village. Although there is no dominant style within the village, the palette of materials has been selected to reflect the local vernacular immediately adjacent and includes buff brick, light coloured render, timber effect cladding and a red pantile roof.

In line with flooding guidelines from the Environment Agency, the building has had to be

lifted approximately 1.5m above the existing ground level. To reduce the impact of this additional height, the design includes dual pitched roofs and dormer windows which has also helped to break up the roof mass with part of the building reduced to two storeys.

Whilst all the apartments are self-contained, there is also a residents' communal lounge and guest suite to the ground floor whilst, externally, communal garden offers opportunities for social interaction in a natural, outdoor setting and provides a green aspect fronting the public view. The existing mature trees will be retained with new hard landscaping including clearly defined parking bays and pedestrian access, including ramps and paved terraces.

Sarah Robson, Development Director for Karbon Homes, added,

*"We've put forward a development which meets the needs of the local community for high quality, affordable housing for older people. After listening to the views of local residents we have made adjustments to reflect their views."*

*"The building is intended to sit comfortably in this location, retaining mature trees around the site, and not being sited too close to neighbouring properties."*

*The design includes dual pitched roofs and dormer windows to help break up the roof mass*



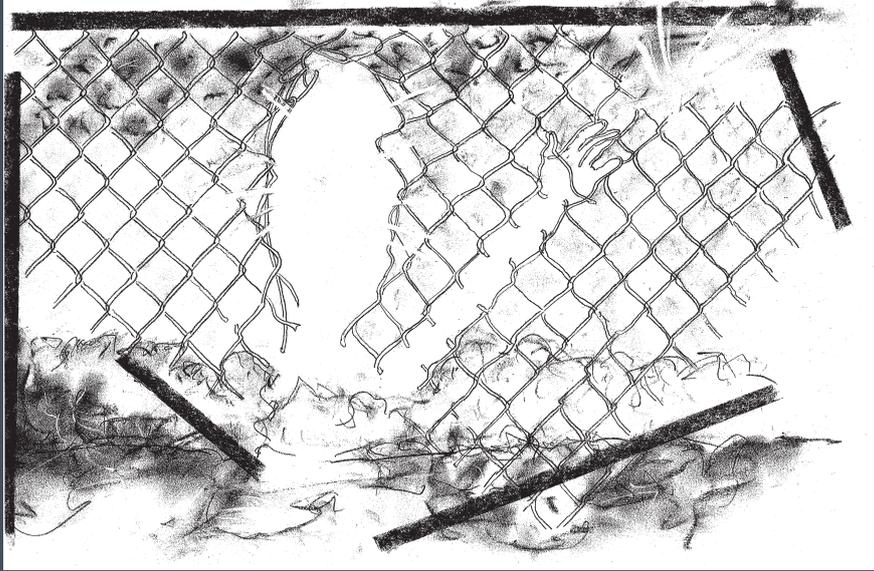
# TIME2SKETCH

On September 24th, we used our lunch break to support the Architects Benevolent Society's fund-raising initiative. The theme of 'Breaking Down Barriers' was given to us just 15 minutes before our one hour of sketching and it was amazing to see our different responses – it's also good to see traditional skills thriving in a digital age!

It was even better to hear that not only had our very own Stuart Franklin been judged national winner of the competition, but also that Alison Thornton-Sykes' design would be used on this year's ABS Christmas Card!

[www.absnet.org.uk](http://www.absnet.org.uk)

Stuart Franklin



**There are no constraints to the human mind, no fences around the human spirit, no barriers except those we build ourselves**



Adam Vaughan

My sketch represents the barriers to climate action and what happens when we break these down. The S curve of carbon reduction splits the 2 sides of the sketch.



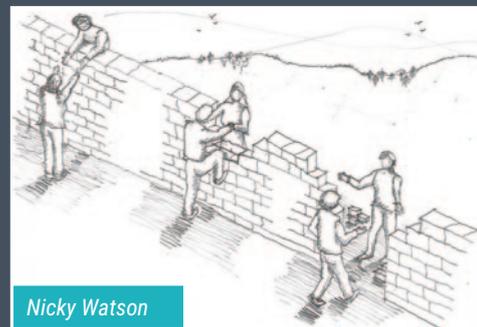
Sam Dixon

Breaking down the barriers of being a working mum in architecture.



Chun-Yuen

My message: knowledge is power to break down barriers.



Nicky Watson

My sketch was based on being active in breaking down the barriers that others are facing.



Lee Xin Lau

Breaking my own 'barrier' - I have taken up the Yorkshire Peaks challenge this summer but I was not able to complete all three peaks. I am making plans to return to conquer all three peaks.



Gavin Wu

The umbrellas represent different styles and cultures while revealing people from all walks of life 'breaking down barriers' and coming together under one 'roof' to escape the rain.



Mura Mullan

The sketch is about breaking down the barriers in terms of construction; rather than having a complex end product a building is broken down into its constituent parts to simplify our understanding of the building process.



Ali Thornton-Sykes

It's about the power of talking to break down mental barriers – the angry faces in the clouds represent the darker thoughts and, through the conversation the two people on the bench are having, the sun is breaking through, casting a unified shadow of the two characters.



Oliver Hopwood

My image represents JDDK, here at Millmount, breaking down barriers around work culture in the architecture profession (which can often be very poor for employees), making positive change to support our wellbeing.

# PASSIVE VENTILATION MAY BE A LIFE SAVER IN THE GAMBIA



Whilst most of us worried about vaccinations and Coronavirus during June, JDDK Architects' Associate Director, Matt Holmes, had more on his mind, travelling to The Gambia to see if JDDK's input into a design for a passive ventilation system in indigenous housing could help prevent the spread of malaria.

The trip, undertaken with his partner, Dr Anne Wilson of the Liverpool School of Tropical Medicine, was to test and hopefully prove a concept Anne had developed jointly with the Royal Danish Academy of Fine Arts of easily installed passive ventilation system which would create sufficient air flow within housing to pull out warm air and the exhaled CO2 to which mosquitoes are attracted, replacing it with cooler external fresh air. The cooler temperatures will also make it more comfortable to sleep under mosquito nets and so their usage should increase.

With air flow already modelled digitally by the Danish Academy using Computational Fluid Dynamics (CFD), Matt's green building and construction knowledge helped the team to develop and finalise the designs taking into account the materials available locally as much as possible, it would then be up to Matt and Anne to build a prototype from which data could be collected for analysis.

Matt explained, "Malaria currently kills just under 400,000 people a year in Africa, and whilst mosquito nets help, they are notoriously uncomfortable to sleep under in hot temperatures so this could be a simple solution to these problems."

"In essence, the design of the Solar Chimney is similar to a lean-to greenhouse with plastic sheets against the traditional mud brick structure. During the day, air heats up within it, rises and is drawn out of the house through the narrow top part of the lean-



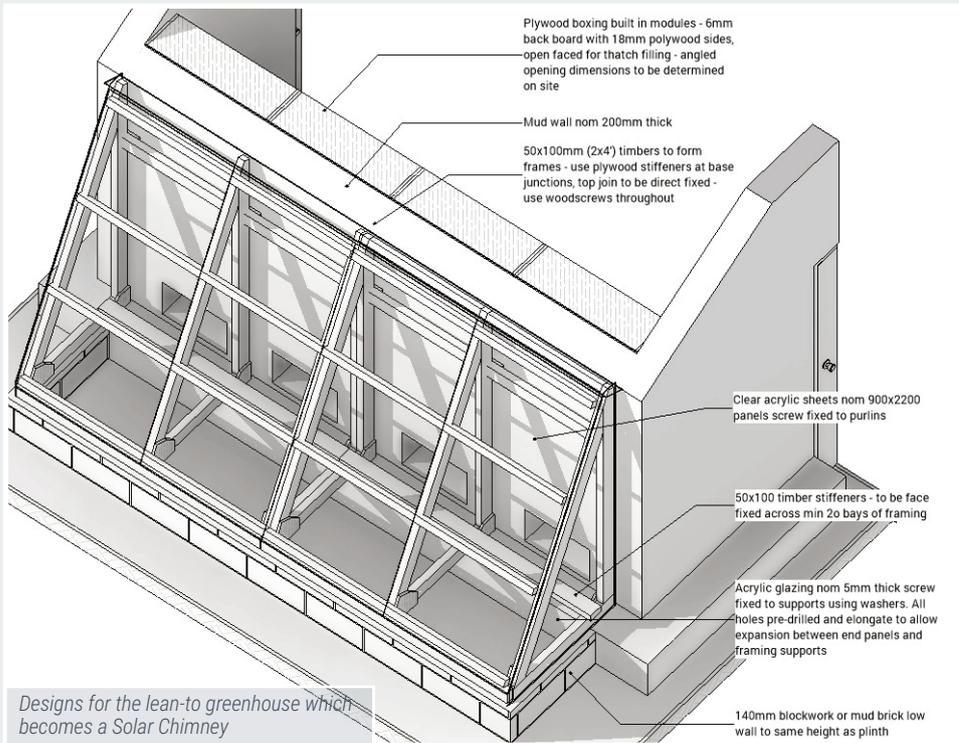
Construction Underway

to structure to be replaced by cooler air which is pulled into the house via windows and into the base of the Solar Chimney through air vents in the wall. At night, the thermal mass of the wall keeps the greenhouse air hot, whilst the inner wall is insulated to keep the hut cooler so the process continues."

"But, whilst it's easy to model the air flow and design from here, we needed to see how a test model could be built using locally-sourced materials which are readily available in The Gambia – hence plastic sheeting and plywood. We had been offered a site at the Medical Research Council's (MRC) Wali Kunda Field Site where a variety of entomological research is being carried and adapted one of the existing huts with the solar chimney – in truth, we cheated slightly by bringing our own fixings and a few tools but that was simply because of the time constraints of our two week stay."

"The trip and the project were very successful and incredibly interesting trying to understand the challenges facing the local population, with the multiple Covid tests and self-isolation upon our return being a small price to pay! We're now awaiting the results of the data collection which will measure temperature, humidity, air flow and mosquito numbers over the next 12 weeks to determine the next steps in the project."

The Solar Chimney research project is a collaboration between the Liverpool School of Tropical Medicine, Durham University, Medical Research Council Unit The Gambia at the London School of Hygiene and Tropical Medicine, and The Royal Danish Academy of Fine Arts - Schools of Architecture, Design and Conservation and is funded by the UK Medical Research Council Confidence in Concept scheme.



Designs for the lean-to greenhouse which becomes a Solar Chimney