



HEALTHCARE

Guidance and experience in the healthcare sector



CONTENTS

- 3.Foreword
- 4.About Chawton Hill
- 5.SECAmb Hastings Make Ready Centre
- 6.University Hospital, Lewisham
- 7.Inclusive Design
- 9.Croft Medical Centre, Eastergate
- 10.Bury St Edmunds Ambulance Hub
- 11.Healthcare Construction and Net Zero
- 13.Ipswich Ambulance Make-Ready Hub
- 14.Chiswick Family Practice
- 15.Make Ready Centres – what are they?
- 16.SECAmb Multi-Use Centre
- 17.Portishead Surgery and Pharmacy
- 18.Ambulance Make-Ready Centres or Hub & Spoke: Why Do They Work?
- 20.St John Ambulance, Leatherhead

CHAWTON HILL

Chawton Hill is made up of an enthusiastic and dedicated team of RICS Chartered Surveyors, construction consultants and project managers. Our RICS Chartered Surveyors and project experts deliver exceptional construction and surveying support to all our clients. From ambulance make-ready centres to primary healthcare facilities and care units, our team of experts is dedicated to ensuring the success of your projects in the healthcare sector.



Bury St Edmunds Make-Ready Ambulance Hub

This brief guide provides some insight and help into how we assist people in the healthcare sector and selected examples of past work. If you have any questions, please don't hesitate to get in touch.



DAVID EDWARDS

Managing Director
david.edwards@chawtonhill.com
01372 360663



JAMES MATTHEWSON

Director
james.matthewson@chawtonhill.com
01372 360663



ABOUT CHAWTON HILL

Chawton Hill have been helping healthcare organisations in & around the South East since the very start of the practice, over twenty years ago.

Our health experience covers a range of projects and stems from being at the forefront of specialist medical and healthcare projects over many years.

Experience includes primary healthcare centres and the latest systems of Ambulance Make Ready Centres and Emergency 999 call facilities.

Make Ready centres come with many great benefits. These include helping to free up front-line staff who, rather than cleaning and re-stocking ambulances, can spend more time treating patients.

Our experience extends to other areas of healthcare, such as medical practices and pathology centres. You'll find more information on these and our many other projects in this booklet.

You can be confident working with Chawton Hill that we have experience working with projects in your sector to the very highest standard.

Client commissions range from minor alteration works and building condition surveys and schedules of condition, to the design and project management of new buildings and sensitively detailed extensions or adjustments and refurbishments.

Key Experience and Services:

Ambulance Make Ready Centres, Emergency 999 call centres, medical and primary care practices, pathology centres and other areas of healthcare



SECamb Hastings Make Ready Centre

The project involved the refurbishment and modernisation of the Hastings Make Ready Centre for South East Coast Ambulance Service NHS Foundation Trust. The works included strengthening the workshop floor to accommodate a new generation of heavier ambulances, alongside the refurbishment of operational and staff facilities.

The refurbishment focussed on improvements to the garage area, kitchen, Crew room and existing office accommodation. It also included the refurbishment of the St John Ambulance office spaces and lecture room. The project was designed to improve the functionality of the facility while supporting the Trust's evolving operational requirements.



We supported South East Coast Ambulance Service with feasibility studies, design development and contract administration. Working closely with the structural engineer, we developed a design solution to strengthen the existing garage floor and facilitate the introduction of the Trust's new electric ambulance fleet, ensuring the facility is fit for future operational demands.

University Hospital, Lewisham

Project Summary

At Chawton Hill we have been supporting University Hospital Lewisham with specifying and managing the refurbishment of their Paediatric Accident and Emergency Department, helping to coordinate and manage works within a live clinical environment.

A key element of the project has involved developing a comprehensive approach to specifying the minor works required. This included producing a detailed photo-based schedule of works, enabling clinicians, operational teams and contractors to clearly understand the scope, location and sequencing of the proposed interventions. The visual approach has helped support engagement across the project team and ensured there is a shared understanding of the works being undertaken within the live department environment.

The method of detailing the works has also created a practical tool for monitoring progress and completion on site, allowing both the contractor team and Trust representatives to efficiently track delivery against the agreed scope as works progress. This approach has supported greater transparency throughout the project and improved quality assurance during delivery.

Working alongside Trust representatives [Matt Collyer](#) and [Jess Haines](#), we developed and agreed the programme of works before negotiating costs and delivery schedules with [R&B Refurbishment](#). A significant aspect of the project has involved detailed logistical planning, including the careful coordination of contractor movements and the safe management of materials entering and leaving the site.

Delivering refurbishment works within a live paediatric A&E environment presents particular challenges. Throughout the programme, maintaining patient safety and minimising disruption to clinical operations remains a central priority, ensuring healthcare staff can continue delivering services effectively while construction activities progress.

Chawton Hill continues to support the Trust through the ongoing delivery of the Paediatric A&E refurbishment works, with discussions also underway regarding a similar programme of improvements within the Adult A&E Department.

“In complex healthcare environments, particularly within live emergency departments, it is essential that all stakeholders have absolute clarity on what is being delivered and how works will be managed operationally. The photo-based scheduling approach created a much more accessible and transparent way of specifying works, helping clinical teams, estates teams and contractors work collaboratively whilst also providing a clear mechanism for monitoring delivery and completion on site.”

— Jess Haines, Director of Development, Lewisham and Greenwich NHS Trust.

If you're interested or need help with cost management, design or surveying on a primary healthcare project, feel free to [get in touch](#) with the Chawton Hill team today.



Inclusive Design

When it comes to designing a new building, or retrofitting an old one, you'll understand the importance of putting inclusive design principles at the heart of what you do. It is no longer enough to add a wheelchair ramp to the front entrance and assume your job is done. Whilst a ramp will make the building accessible for wheelchair users, accessibility does not always equal inclusivity.

Accessible design meets the minimum mandatory requirements for access and facilities for those with disabilities. These are covered in the Government's statutory guidance document Access to and use of buildings: Approved Document M.

Inclusive design looks beyond this, creating spaces that work for the needs of everyone. The aim is to enable and empower those that use a building going beyond a one-size fits-all solution. A helpful starting point here is the RIBA's Inclusive Design Overlay.

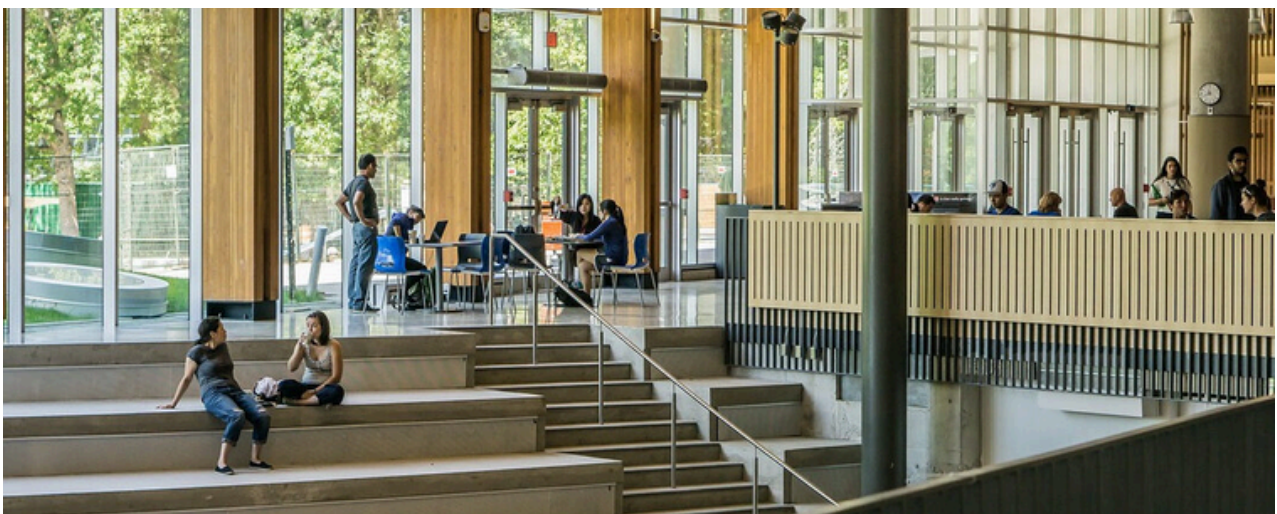
In this article, we'll cover some of the ways the built environment can embrace inclusive design principles.

What's Covered

By its very definition, inclusive design needs to cover the needs of the population. It can be tricky to pin down exactly where to focus efforts, in order to design a building that works for all. However, most design approaches agree there are three main areas to consider:

- **Abilities:** This covers a wide scope of physical and intellectual abilities, plus factors such as age, body type, medical conditions and physical fitness.
- **Gender & Sexuality:** Male/female and LGBTIQ+ identities.
- **Faith & Culture:** Covers differing cultural and religious needs.

The first step is to understand the demographics of your users (and potential users) and what their varying needs may be. For example, if there is a large Muslim community in your area, you may consider designing spaces that can be used as prayer rooms. If you expect your user base to be elderly, or less steady on their feet, handrails may play an important part in the design.



Inclusive Design

The Principles

1. A people first approach:

By putting users at the heart of your designs you can remove barriers and improve access for all. It is important to include as many people as possible in the design stage. Having a diverse team can help us see issues we may not have considered.

2. Acknowledge diversity and difference

The environment needs to meet as many needs as possible. This can be tricky, but identifying barriers early in the design process can help. Think beyond accessibility requirements and consider what barriers may be experienced by people with learning difficulties, mental ill health, visual impairments and hearing impairments.



3. Offer Choice

It is not always going to be possible to design one solution that suits all users. Even within one group, users will not be homogenous and their needs may vary. Avoid aiming for the minimum targets and consider the variance across your user base.

4. Flexible Use

The best way to achieve this is to truly understand how the building will be used. Consult with the client and end users, discover what happens now and what the space might be used for in the future. Consider design changes which can serve multiple purposes. For example, ramps instead of staircases can make buildings more accessible for wheelchair users, those pushing prams and carrying large luggage.

5. Convenient and Enjoyable

By removing barriers, you can create an environment that is easy to use for everyone. How will users move around the building? Is signage sufficient? Give users the confidence in your space and they will be able to make effective, independent choices about how they use it.

If you apply these principles to your designs, you'll find your buildings become accessible for more users.

Croft Medical Centre, Eastergate

Project Details

The Eastergate development began in 2022 with a vision to deliver a high-quality, sustainable primary healthcare facility that would achieve [BREEAM Excellent standards](#). Our roles as employer's agent, quantity surveyor, and principal designer involved guiding the project from inception to completion, ensuring cost certainty, compliance, and quality delivery.

Delivery and design

The project incorporates a number of sustainability features suggested by the design and client teams. The roof is equipped with photovoltaic panels and plant. Sustainable Drainage Systems (SuDS) are included.

Challenges

We worked closely with the entire project team to overcome a number of challenges, including:

- **Cost Control** – The Chawton Hill team put forward Innovative approaches to reduce additional expenditure and protect value for the client.
- **Landscaping and Bunds** – We put forward solutions to manage spoil removal and bund formation, reducing costs while enhancing the site's landscaping.
- **Power Supply** – Complications with incoming power required us to closely coordinate with utility providers to resolve the issues without disrupting the project.

Outcome

Following a challenging start to the project, we worked with the team to deliver a high quality, BREEAM Excellent building with an EPC rating of A.

Thanks as always to the entire project team. Should you need help on cost management, design or surveying on a primary healthcare project, please don't hesitate to [get in touch](#) with one of the team today.



Bury St Edmunds Ambulance Hub

Project Details

Construction of the Bury St Edmunds ambulance hub is now complete. Chawton Hill's support on this project saw us working with one of England's largest ambulance trusts. The **EEAST** trust serves over 6.3 million people across East Anglia. In collaboration with the East of England Ambulance Service NHS Trust (EEAST), this 2,900m² ambulance hub, will serve as a make-ready central reporting hub. It features a training facility with space for 33 ambulances.

The facilities include offices, meeting and training rooms, toilets, and expansion space on the first floor. The space also includes a crew room, locker room, gym, drying room, welfare spaces and an ambulance fleet workshop on the ground floor.

The operation of the Bury St Edmunds ambulance hub is designed to be fully net zero carbon. As a result, the features included will significantly reduce the carbon emissions and footprint of the facility. Smart technologies and innovations include over 1,000m² of photo-voltaic ("PV") panels, contributing to generating renewable energy on site. The scheme achieved BREEAM certification of "Excellent" and an EPC rating of A+.

Tom Abell of EEAST noted that, *"Once opened, it will allow paramedics to spend more time out on the road treating patients, and provide better wellbeing facilities for them as well."*

Sincere thanks to Corstorphine and Wright and to Parkway Construction for the project photography.



Healthcare Construction and Net Zero

Net Zero

Back in the summer of 2022, the NHS became the first health service to have net zero healthcare driven by legislation through the Health Care Act 2022.

With an ambitious target, a new report 'Delivering a Net Zero National Health Service' sets out the path to achieve this goal by 2045. In this article, we look at what net zero targets mean for construction projects in the healthcare sector.

Step number five on this path is the construction of 40 new 'net zero hospitals'. It probably comes as no surprise that the construction industry is a leading contributor to greenhouse gas emissions in the UK. So, how do you build 40 new hospitals and achieve net zero?

Interestingly, these new hospitals account for less than a fifth of the secondary care estate. Across the whole NHS, estate and facilities comprises 15% of total NHS carbon emissions. So it seems as well as looking at building new hospitals, work will need to be done to adapt current facilities to make them more energy efficient.

In this article, we take a look at some of the recommendations in the report. How do they apply to building projects in the healthcare sector?

Upgrades to existing healthcare buildings

There are many options when it comes to improving the energy efficiency of old buildings. HVAC might be a good place to start. Air conditioning and ventilation are vital in healthcare centres. They play a significant role in the safety of hospitals, keeping the concentration of airborne bacteria at bay.

By joining up HVAC and introducing smart controls, you can better control the way the system is used. Turning off ventilation in unoccupied consulting rooms or increasing the flow in particularly busy areas. Upgrading old equipment, whilst a significant one-off cost, can save on long term costs as new technology tends to be more efficient than old.

Improving insulation can mean that less energy is needed to heat buildings in winter. Sometimes something a little more drastic is needed, such as the redesign of part of the hospital building that will deliver ongoing energy savings, through better insulation, door seals, and effective airflow.

The NHS Energy Efficiency Fund will look to spend £50m upgrading the lighting systems across the estate. LED lights use up to 80% less energy than traditional lightbulbs. Just a simple switch could save up to £3 billion over the next 30 years.

Healthcare Construction and Net Zero

Brand New Net Zero Carbon Hospitals

A new Net Zero Carbon Hospital Standard has been available since spring 2021. The aim is to apply it across the 40 new hospitals to be built as part of the government's Health Infrastructure Plan.

One of the answers lies in design. There are some steps that can be taken early in the process, that can help buildings to avoid getting too hot in the summer or needing too much heat in the winter. For example, the layout and orientation can help support ventilation systems. Whilst some areas of hospitals will require carefully managed ventilation systems, innovative design can allow other areas to rely on natural ventilation.

Design with thought to natural daylight can reduce the need for artificial lighting. Conversely, solar shading can reduce heat gains. It may be worth considering how roof space is used, and whether this can be optimised for solar panels or green roofs to help with insulation.

All of these design elements require careful balancing in order to identify the most sustainable option.

Design Choices

These design choices will ultimately lead to a building that produces less carbon throughout its operational lifecycle. However, much of the embodied carbon in building projects comes from the production of building materials itself.

Concrete, steel, aluminium and glass account for 11% of all global carbon emissions. To tackle this, new hospitals will need to be built with low-carbon materials. This may also include applying circular economy principles to building materials.

Healthcare projects have always been more complicated than your typical building project. These new guidelines mean that new and innovative techniques will need to be applied. You'll need an experienced team by your side as you tackle your next healthcare construction project.

Chawton Hill have vast experience in the healthcare sector and sustainability. Get in touch today to discover how we can support your next project.



Ipswich Ambulance Make-Ready Hub

We're delighted to be supporting East of England Ambulance Service Trust (EEAST) with the next of their make-ready hubs. This project is for the Ipswich ambulance hub. Emergency services times notes:

Having received funding from the government's scheme to upgrade healthcare facilities, East of England Ambulance Service now has planning permission to develop a new make ready hub near Ipswich.

The £10 million hub will house a 24/7 make ready and workshop service, which will help keep more ambulances on the road and clean and restock vehicles. It will also have dedicated welfare spaces where staff can relax, quiet spaces, and a wellbeing garden.

You can read a full article about the Ipswich hub on the EEAST website.

We look forward to supporting the trust with another important project. The hub will ensure an emergency service fit for 2025 and beyond. Check back for more details in the coming months.

To find out more about our work on make-ready centres / ambulance hubs visit the [Chawton Hill website](#)



Image : EEAST (East of England Ambulance Service Trust)

Chiswick Family Practice

Chawton Hill acted as employer's agent and quantity surveyor on this project. The brief being to manage the fit-out to shell and core at the Chiswick Family Practice.

Working with multiple parties, we worked collaboratively to ensure the successful delivery of the project for the Chiswick practice. It included the fit-out and installation of furniture, fittings and equipment. The project combined two existing surgery facilities, allowing the practice to expand its patient capacity.

Chawton Hill, together with contractor ITC; Architect MEB Design, and M&E Consultant Mecserve successfully delivered the project. As a result, the practice has improved modern facilities fit for the 21st Century.

Adrian Powell of NHS properties described the project as having, *"...a hugely positive impact on the local area... a new and improved health facility in which frontline staff can continue to deliver excellent patient care."*

The practice added, "Our current building is much older and smaller in comparison to the new facilities which will provide 551sqm of space and will benefit our patients with additional clinical rooms, enhanced procedure rooms, a wheelchair accessible reception and waiting area. Working in a more modern building with enhanced technology... is also welcomed by staff."

'In comparison to our smaller, older building, these much larger premises are being welcomed by the staff. The new premises will also provide us with training facilities and our patient consultation groups will also have the opportunity to meet more easily.'

We are delighted to have helped support a transformational project, providing the community in West London with better, high quality medical care.



Make Ready Centres – what are they?

Make Ready Centres involve a system which sees ambulances prepared by a dedicated team of specialists in a purpose built or converted building, who clean, restock and check the equipment on ambulances before the beginning and at the end of every shift.

For years paramedic staff were responsible for cleaning, restocking, fuelling and maintaining their ambulances at the beginning and end of every shift. This was a time consuming process that took specialist care staff away from looking after patients.

Statistics from the South East Coast Ambulance Service show the real benefits of this new Make Ready system;

- **Improved infection control rates** – by way of assurance swab test are undertaken by an independent laboratory on 10% of the vehicles that have been deep cleaned. Not surprisingly, the results would indicate that the repetitive cleaning undertaken at every shift in the MRC produces a higher standard.
- **Critical vehicles failure rates** – The Trust's target for vehicles failures at the start or during a shift is four vehicles failures in every 25,000 miles. In the Make Ready system there are no failures at the beginning of shifts. When the Make Ready Centre in Thanet began there were about 6 failures per day compared now to a maximum of 6 per month. The less failures the more time an ambulance crew is available to respond to patients

- **Deep cleaning** – 100% of vehicles are deep cleaned every 6 weeks in Make Ready Centres. This involves the vehicles being stripped down of all equipment and furniture and cleaned. The percentage outside the Make Ready system is 75%.
- **Equipment failure rates** – Under the Make Ready system there are very few failures such as infected, not being there, out of date or not working equipment. At ambulance stations moving to the Make Ready Centre in Ashford, 6% of stock was unusable (cost £2,000) prior to moving to the Make Ready Centre. The vehicles held 14% of unusable/out of date stock (£3,600). At Paddock Wood stations 8% of stock was unusable (£3,600). On vehicles 18% of equipment was unusable (£4,300). Overall £14,000 stock from stations and vehicles was unusable.



SECAmb Multi-Use Centre

South East Coast Ambulance Service (SECAmb) developed one of their first c.700 square metre 999 Emergency Centres in Crawley. Equivalent to around three tennis courts, it's designed to eventually handle some 50% of all Emergency 999 Ambulance calls in Surrey, Kent, East Sussex and West Sussex.

Call centres have come along way in recent years. Gone is the 'boiler room' tucked away at the back of the building, today many organisations are seeing their call centre as one of their most important assets.

SECAmb's Acting Assistant Director of Clinical Operations, Sue Skelton said: *"The public should be reassured that our plans will not have an impact on the way we deliver the service other than improving the service we offer. Staff will also have new, fit-for-purpose facilities they can be proud to work in."*

The plans will provide us with the additional capacity we need to match the rising 999 demand and allow more clinicians to be on hand to help direct patients to the right healthcare. With 999 calls having increased by about 25% since 2007 and with demand forecast to increase by 5% year-on-year, we can't afford to do nothing."

Chawton Hill were involved in this vital 999 Emergency Centre project from the very start, giving us an almost unique insight into the processes required to set up and build the centres.

Our team of specialist surveyors advised SECAmb on the building lease agreement with Surrey County Council and are now heavily involved in the internal design & fit out of the new Emergency Operation Centre (EOC) and SECAmb HQ.

Our imaginatively designed and pleasant environment helps EOC staff to provide the very best, most efficient public service. For example:

- Dual power supply with on-site generators.
- Dual cabling offering continuous data and power supply should one circuit fail.
- Pipe within pipe water supply, minimising internal water damage in the event of a leak.
- Active workstation space is limited to 60% of the floor leaving plenty of room for other functionality.
- Maximum natural lighting supplemented with minimal glare lighting.
- Optimised acoustics using sound-absorbing ceiling tiles, carpeting, and wall coverings; strategically located plants.
- Standing desk options to help alleviate fatigue and posture issues.



Portishead Surgery and Pharmacy

This new-build project in Portishead, near Bristol, saw Chawton Hill appointed as the employer's agent and project manager for the design and build project in the West Country.

The client was General Practice Investment Ltd. Chawton Hill worked closely with the entire project team to deliver a stunning new project to help transform healthcare in the area.

The project is a 1900 m² health centre developed over three floors. It incorporated a central circular entrance & waiting area, with two wings providing optimum space use of a tight corner plot.

The finished building features space for a 15,000 patient GP practice to accommodate six regular general practitioners.

It also has associated treatment rooms, a minor surgery unit and a pharmacy. There is ancillary office space and room for the North Somerset Primary Care Trust.

Chawton Hill were proud to be involved in this project, completed on time and to budget achieving "Excellent" status on the NHS Environmental Assessment Tool (NEAT).

For more on our healthcare projects and experience, head to the Chawton Hill website or get in touch today.



Ambulance Make-Ready Centres or Hub & Spoke: Why Do They Work?

The plight of the ambulance service has been thrust into the spotlight in recent years. News outlets report, *'record-breaking waiting times'*. The Health Secretary recently declared ambulance wait times a *"number one priority for winter"*.

So what might ease the challenges faced by the ten core English ambulance services?

One solution is the creation of make-ready centres, sometimes referred to as 'hub and spoke' systems. These dedicated centres differ from traditional ambulance stations. They provide a single point of servicing and repair. This allows regular and easier maintenance, improving availability.

The NHS and Lord Carter produced a report before the COVID pandemic. It outlined key points ambulance authorities should consider, to improve operational productivity and performance. The report identified three critical areas for improvement:

- Staff
- Technology
- Fleet management.

It is in the latter two, particularly fleet management where the make-ready centre really comes into play.

Reducing Estates Expenditure and Inefficiency

The report identifies the need for standardisation of vehicles, stock, processes and equipment. It also discusses estate expenditure and the need to use make-ready systems. One trust had reduced operational estates by 72% by employing such a system.

The latest data shows the service being 7 seconds faster than average for category 1 emergencies. This improves to over 1 minute faster than average for category 1T calls.

The strong investment in make-ready centres by SECAMB is ongoing. Our support on Banstead and other regional centres is ongoing. Chawton Hill has been working with several NHS trusts on make-ready centres.

You can find out more about what a make-ready centre is in detail on our earlier article. But what is it that makes them work, what needs considering, and what lessons have we learned over the years?

Ambulance Make-Ready Centres or Hub & Spoke: Why Do They Work?

Standardisation is Key

Something Chawton Hill identified early on, was the need to create standardised processes. There are key lessons learned which we have recorded and now use for new projects. These enable us and our teams to ensure the construction and management of the centres is as efficient as possible.

Our lessons learned document is extensive, but includes such considerations as:

- Identifying standards for medicine rooms early in project.
- Positioning of wash facilities to minimise disturbance to other functions.
- Standardisation of facilities for electric vehicles and electrical facilities for ambulances.
- Standardisation of gas cages etc.
- Standardisation and adequacy of storage facilities.
- Identification of trusted and experienced approved suppliers.
- Standardisation of facilities for cleaning, washing etc.
- Functionality to maximise speed of vehicle entry / egress.
- Implementation of environmental standards such as BREEAM.
- Considerations for active travel for staff – cycle facilities etc.
- Positioning of facilities and equipment for maximum convenience. These include vehicle refuelling, oil, AdBlu, etc.

This list is a small sample of the many things we consider and standardise when managing the creation of a make-ready centre.

By ensuring each one is as functional and standard as possible, the best use of space can be assured. Staff are able to work as effectively as possible in each location, guaranteeing full efficiency.



St John Ambulance, Leatherhead

The project at the St John Ambulance headquarters building in Leatherhead started with the demolition of the existing building.

Following this, construction began for a new mixed use facility with 3 flats above. The development included new purpose built offices and with a regional training centre.

Chawton Hill were involved in the negotiation of the heads of terms and compilation of the room data sheets.

The design of the building was planned to enable the ground floor commercial element to be readily converted to residential accommodation should St John's Ambulance decide to dispose of the asset in the future. In 2016, St John Ambulance converted the ground floor back into residential accommodation.

Chawton Hill supported the client over the course of 12 months, from inception to completion. Our role managing the employer's requirements and working closely with the entire project team, meant the finished project matched the client's expectations.

The St John Ambulance in Leatherhead now have a mixed-use building which provides revenue to support their work as well as a fully functioning HQ building.

For more on our healthcare projects and experience, head to the Chawton Hill website or get in touch today.





chawtonhill.com

01372 360663

info@chawtonhill.com