

Iceni Projects Sustainable Development

February 2019



"It is refreshing to find a company like Icení, an energetic business that has brought together a group of like-minded, diligent professionals with a wide range of specialist planning, political and highways disciplines, who are passionate about their work and meeting the needs of their clients. My team and I receive prompt and efficient advice from Icení that is well presented, user-friendly and yet also provides detailed back-up information exploring the wider aspects of the brief that is put to them where appropriate. I would not hesitate to recommend the services of Icení to others, and have already done so".

James Barnes, Development Director, Generator Group

"Icení Projects bring a commitment to their work. That commitment is personal and real. Icení Projects are well respected and are listened to by policymakers and decision takers. This means that they are able to negotiate consents where others would often need to go to appeal"

Russell Harris QC, Landmark Chambers

"Thank you once again for accommodating us and your generous hospitality. The collective contributions you gave were very much appreciated and have provided the students with some excellent insight. They were impressed with what they saw and heard so I suspect a number will be in touch in the future".

Nick Smith, Associate Head of Development, University of West of England

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Introduction

The built environment has a significant part to play in mitigating the effects of climate change, with sustainable development capable of providing better environments in which we can all live, work and play.

Icení Projects' Sustainable Development Team are experts in navigating the labyrinth of sustainability planning policy, whatever the nature of the client's development ambitions.

In a world of constantly changing sustainability legislation, at a European, national and local level, it can be difficult to define specific sustainability objectives for developments of different scale, sector and location. Energy strategies and sustainability statements are now a commonplace planning

requirement, with ever more stringent carbon dioxide reduction targets applied by local authorities.

The nature of our services reflects a pragmatic approach to sustainability, aiming for best practice wherever possible whilst respecting project viability. In order to ensure the maximum impact of sustainability measures, they need to be considered at the very outset, and woven into the fabric of the design, with the buy-in of all project stakeholders. We will act as guardians of sustainability throughout the design, planning, construction

and operational phases of built environment projects, ensuring that the client's sustainability objectives are well defined, efficiently executed and achieved to the satisfaction of all concerned.

Our work is interlinked with Icení's expertise in planning, design, heritage, engagement, delivery and transport to ensure a holistic and well informed approach to the design and planning process.



Services

Sustainable development encompasses a broad range of factors, which require detailed analysis to ensure that development will be fit for purpose and futureproof, meeting the needs of current and future generations.

We provide advice on built environment sustainable development at all stages, from project inception to completion. Our aim is to get the best possible results for our clients and stakeholders, giving realistic and pragmatic, yet creative and commercial, guidance, that will stand the test of time.

Our services include:

ENERGY ANALYSIS

Detailed assessment of early stage building energy usage to ensure carbon dioxide emissions are minimised, in line with national and local authority policy requirements.

SUSTAINABILITY STRATEGIES

Development of best-practice sustainable design and construction strategies to reduce the environmental impact of construction and operation.

DAYLIGHT, SUNLIGHT AND OVERSHADOWING

Assessment of the impact of development on neighbouring properties and internal daylight levels in line with BRE guidance.

FLOOD RISK AND SUSTAINABLE DRAINAGE

Assessment of flood risk in line with NPPF guidance and sustainable drainage strategies to reduce surface water runoff.

WASTE AND RECYCLING

Development of operational waste and recycling strategies to reduce waste sent to landfill.

CIRCULAR ECONOMY

Production of circular economy strategies to ensure materials are retained in use at their highest value.

SUSTAINABLE DEVELOPMENT SCORECARD

Bespoke Scorecard analysis to demonstrate compliance with NPPF sustainable development principles.

SUSTAINABILITY ACTION PLANS

Providing tailored guidance and leadership on large scale development projects, ensuring sustainable development is considered at all stages of the building lifecycle.

ENVIRONMENTAL DESIGN

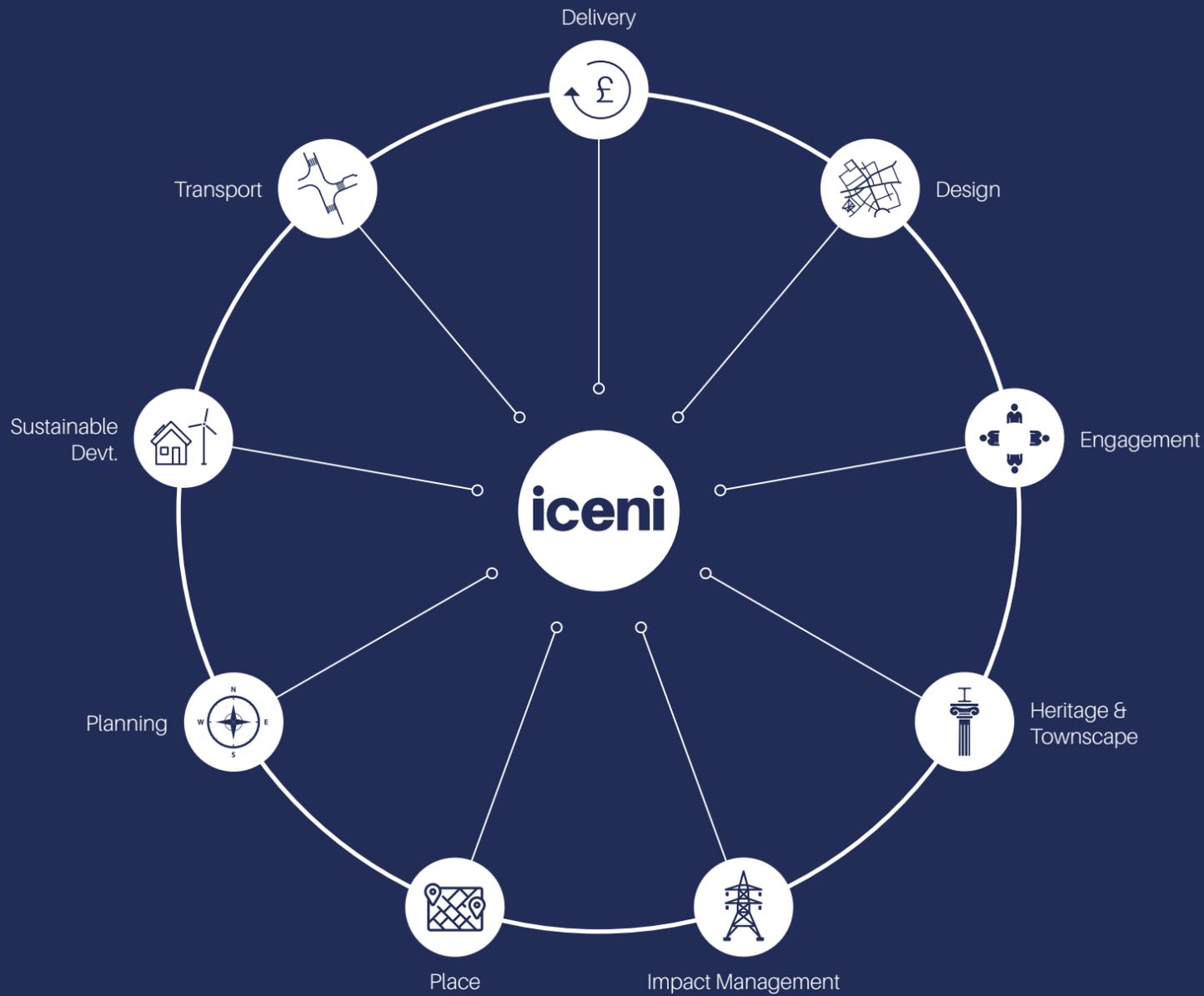
Use of complex computational analysis to optimise built form to minimise energy use.

FACADE DESIGN & THERMAL COMFORT

Optimisation of facade designs to maximise natural daylight and beneficial solar gain without compromising on internal comfort levels.



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The Team Structure of IcenI

 **Ian Anderson**
 Chief Executive

 **Andrew Gale**
 Chief Operating Officer

 **James Bompas**
 Director | Business Devt. & Strategic Planning

DELIVERY

 **David van der Lande**
 Director

DESIGN

 **Paul Drew**
 Director

ENGAGEMENT

 **Ciron Edwards**
 Director

 **Philippa Curran**
 Director

HERITAGE & TOWNSCAPE

 **Laurie Handcock**
 Director

PLANNING

 **Anna Snow**
 Director | Central London

 **Eilish Smeaton**
 Director | Strategic

 **Gary Mappin**
 Director | Glasgow

 **Ian Gallacher**
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 **Ian Mayhead**
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 **James Waterhouse**
 Director | Strategic

 **John Mumby**
 Director | Urban

 **Kieron Hodgson**
 Director | Central London

 **Leona Hannify**
 Director | Strategic

 **Murray Graham**
 Director | Manchester

 **Nick Ireland**
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SUSTAINABLE DEVT.

 **Dan Jestico**
 Director

TRANSPORT

 **Clive Burbidge**
 Director

 **Fred Peters**
 Director

 **Mike England**
 Director

**Sustainable
Development:**
Providing a
lasting legacy



Image courtesy of Feilden Clegg Bradley Studios

The Team, Sustainable Development



Dan Jestico
Director

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Dan has a history grounded in sustainable development and advanced numerical modelling.

Dan has over seventeen years of experience modelling complex physics. His knowledge places him at the forefront of European, national and regional sustainability legislation and related assessment techniques.

He has worked collaboratively across the property industry to co-ordinate pragmatic approaches to sustainable development for a wide range of clients. He is of the view that approaches to sustainable development should be bespoke, considering the scale, sector and location of development. These approaches should address not only environmental aspects, but also economic and social factors.



Joel Coakeley
Consultant

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Joel's in depth knowledge of his subject field allows him to deliver successful results with the clients best interests in mind.

Joel has a background in environmental sustainability, tailored to focus on sustainability of the built environment. He has developed a wealth of experience across all aspects of building performance, ranging from designing and developing complex energy and sustainability strategies, assessing building daylight performance, analysing site specific flood risk and designing sustainable urban drainage systems. Further to this Joel has also had experience in designing passive design strategies based on dynamic thermal simulations.

Our Clients & Partners



Sustainable Development

A sustainable development is not just a scheme that meets the planning policy requirements of a local authority. A sustainable development is more than a building with a BREEAM label on it. A sustainable development isn't just PV panels on the roof or somewhere close to a train station.

A sustainable development is a better place – for the people who use it, the investors who treasure it and the longer term. A sustainable development is one which provides benefits to occupants and wider communities for years following build completion.

The most sustainable developments aren't necessarily the 'greenest' or the lowest energy. They're the ones where people want to live, work and play. The ones people want to own.

Our expertise helps to implement sustainable development strategies that span the project lifecycle. From the concept, where the desired outcomes are defined, through to operation, where the success of the project is measured and reviewed. We know what success looks like and the parameters for this must be defined at the outset of the project.

The long term sustainability of our communities doesn't just make sense from an environmental or social value perspective. It has economic impact. The real estate fund managers who are trusted to invest our savings and pensions are vigilant to ensure

development will be adaptable, resilient and provide long term investment security as our climate and communities change over time. Icen's sustainable development is real economic value creation in action.

Our developments are capable of responding to these challenges. We ensure that development is adaptable and resilient, designed to meet the needs of investors to provide greater security for your investments. For the short and long term.



Arena Essex, Thurrock

Iceni Projects were instructed in late 2017 to submit a hybrid planning application for up to 2,500 dwellings; a new lido with ancillary café; community pavilion; mountain bike / pump track; primary school; convenience retail store; open space and transport upgrades. This planning application was submitted in November 2018.

The site is extremely challenging from a technical perspective and has a very large number of planning constraints. For this reason, the site has historically stalled, notwithstanding a single-issue review as part of the former Regional Spatial Strategy that identified the site as being well-placed to support growth around Lakeside Shopping Centre. These constraints include: Green Belt; existing uses (motorsport circuit); overhead pylons; protected cudweed; HSE consultation zones; being within an air quality management area; a susceptibility to noise from the A13 dual carriageway and M25 motorway; being in an area prone to highway blockages and as a former quarry site there are also significant topographical challenges.

Statutory and non-statutory consultees participated in several focused workshops that were framed around: (1) transport access; (2) the environment and ecology; (3) health and wellbeing; (4) amenities (e.g. noise, air quality, daylight /

sunlight) and (5) utilities and water management. These workshops enabled inherent tensions between stakeholders to be unlocked.

The Sustainable Development Scorecard was employed to assess the design of the project against sustainable development principles, with workshops held at key milestones during the pre-planning period. Successive iterations of Scorecard analysis demonstrated the scheme's sustainability journey, with the submitted scheme achieving a very high level of agreement with the NPPF's sustainable development principles, balanced across the economic, environmental and social pillars of sustainability.

The Iceni Sustainable Development team also produced daylight/sunlight analysis, together with sustainability and energy strategies for the scheme, employing high levels of passive design, heat pumps and rooftop solar PV to reduce development carbon dioxide emissions.



114-118 Lower Marsh, London

Borough of Lambeth

The redevelopment of the council-owned land at 114-118 Lower Marsh and the adjoining Granby Place will deliver a retail and office led mixed use development.

Conran + Partners sensitive and contextual New London Architecture Awards shortlisted design will repair and enhance this prominent site in the Lower Marsh conservation area, providing:

- A new, high quality development that makes a positive contribution to the Conservation Area
- New purpose built, flexible office (and employment) space appropriate for SMEs, to the benefit of the local economy
- A new, retail active frontage that will contribute towards the vitality and character of the primary shopping area
- A revitalised Granby Place as a public realm area for the benefit of the local community, workers and visitors
- The opportunity to open up a through route from Granby Place to Launcelot street, a pedestrian link between Lower Marsh and Waterloo Station, and the

potential to bring the arches beneath Station Approach Road into greater use.

The Icení Sustainable Development team supported the application by producing sustainability and energy statements, demonstrating the ability of the project to perform to exacting London Plan carbon dioxide emissions standards. This was achieved through a combination of fabric efficiency measures, intelligent lighting controls and rooftop PV panels.



Compass Park, Bushey

Compass Park seeks to build upon an existing 200 year legacy by facilitating the growth of a new community in Bushey.

Iceni Projects is working closely with the client and consultant team to prepare a robust masterplan for approximately 47 hectares of land north of Bushey, Hertfordshire.

The design solution utilises the mature landscape setting of the site, and includes the provision of care facilities and a primary school, as well as providing much needed housing.

Working with technical consultants, the proposed scheme builds on the existing landscape to provide a parkland led masterplan, and produces an environment in which a new community can thrive. Iceni's Sustainable Development team contributed to promoting the scheme, analysing competing sites and providing recommendations for the Compass Park scheme using the Sustainable Development Scorecard.



Sackville Road, Hove

Iceni Projects advised MODA Living and Audley on the redevelopment of the Sackville Trading Estate and Hove Goods Yard. The application, submitted in November 2019, consisted of 613 build to rent homes, 4,000 sqm flexible B1 office accommodation, a 265 unit specialist accommodation for older people, a health and wellbeing centre and retail floorspace on the 3.59 hectare site adjacent to Hove Station.

Iceni's Sustainable Development team produced a One Planet Living strategy which accompanied the application. This strategy demonstrated the project's commitment to delivering tangible sustainability outcomes, during the design, construction and operational phases of the project. Whilst a BREEAM pre-assessment was also provided, the One Planet Living strategy goes further, aiming to encourage new occupants and neighbours to make sustainable lifestyle choices, focussed on building a new, sustainable community in the heart of Hove.

The commercial success of the build to rent market is dependent on maximising occupancy with low void periods. This sets the build to rent sector apart from traditional housebuilding. In order to attract long-term residents, the quality of design,

placemaking and wider community engagement is key. These factors go hand-in-hand with sustainable development principles and local authority objectives for the site, as the developer's returns are focussed on the long-term operational success of the scheme, as opposed to sales.

Through the use of a community heating system, utilising combined heat and power systems, the residential elements of the development were shown to achieve carbon dioxide emissions savings of over 20%, when compared to the Building Regulations baseline.



Abbey Retail Park

Iceni Projects have worked closely with Weston Homes and Broadway Malyan architects in the design of a landmark, residential led development close to Barking town centre.

The regeneration scheme will provide over 1,000 new homes at market and affordable rates, together with retail, leisure, employment and community spaces on a vacant site adjacent to the River Roding. Significant space is given over to the public realm, including a riverside public square, linked to Abbey Green by a car free boulevard running through the site from east to west.

The bank of the River Roding will also be naturalised to provide a green infrastructure corridor through the site which, together with an expanse of green roofs, will bring improvements to the site biodiversity.

In order to maximise the scheme's energy efficiency, the new homes have been designed to reduce energy demand for heating, and will connect to the Barking Town Centre heat network, minimising operational carbon dioxide emissions. The use of rooftop photovoltaic panels, integrated with the green roofs, will also provide onsite renewable electricity.

The proposed scheme has been assessed using the Sustainable Development Scorecard methodology, achieving an excellent score for overall sustainability.



Church Square, Bedfordshire

Iceni projects have supported the planning application for the Church Square mixed use development, providing a single ground floor commercial space and 18 new build residential dwellings in Leighton Buzzard, Central Bedfordshire.

The proposal looks to redevelop the site, demolishing the disused postal sorting block, creating new amenity space and employment opportunities both throughout the construction process and operation of the commercial space.

Iceni's Sustainable Development team produced a range of reports and assessments to support the application, including:

- Sustainability & Energy Statement
- Flood Risk and Sustainable Drainage Assessment
- Daylight, Sunlight and Overshadowing Assessment

The scheme has been designed to be resilient and resilient to the effects of climate change, with efficient building fabric and systems minimising the risk of overheating and efficient fixtures and fittings reducing the water consumption for both the residential and commercial components.

The influence of future flood risk has also been taken into account, with an increase in permeable ground,

landscaping and sustainable drainage systems implemented in order to reduce the risk of flooding on site and elsewhere in the catchment.

Finally, the building form has been designed to have a minimal impact on the daylight and sunlight available to the existing surrounding buildings, taking into account the dense urban nature of the development site.



Ada Lovelace High School, London Borough of Ealing

Iceni Projects further enhanced their education credentials by delivering planning permission for a desperately needed permanent secondary school for Kier Construction and to meet a challenging timetable. Iceni Planning, Transport, Engagement and Sustainable Development were all part of a large project team.

When fully open in 2021, the school will accommodate 1,300 pupils in a four storey building. The site was allocated in the Local Plan, but partially (the playing fields) remained in Metropolitan Open Land. The project team overcame a number of technical constraints including transport, noise, design, air quality and daylight/sunlight to deliver a scheme that was supported by officers.

Iceni Sustainable Development successfully demonstrated that the development of the school would not lead to a loss of daylight/sunlight amenity to neighbouring properties.

Iceni Engagement also scored a major success, with the application attracting over 400 letters of support. Even though there were nearly 100 letters of objections from local residents, including

commissioning their own technical objection, the application was approved unanimously by Ealing's Planning Committee.



Highgate Newtown Community Centre

Iceni Projects have been advising Camden Council on the redevelopment of this site since 2016. Funded by Council's Community Investment Programme, the aim of the project was to secure the long term future of the Highgate Newtown Community Centre (HNCC) and Fresh Youth Academy (FYA) on the site by demolishing the existing buildings and providing a modern fit for purpose facility.

Throughout the design process the key project objectives have been retained. Through redevelopment the team has aimed to:

- Secure the future provision of a sustainable level of community and youth services on the site
- Provide a mix of new, high quality housing to enable the necessary funding for the community centre's redevelopment
- Increase awareness, relevance and use of the suite by the whole community

The scheme consists of extensive community facilities for the Highgate Newtown Community Centre and Fresh Youth Academy,

including a sports hall, recording studio, cafe, gym and activity rooms.

The scheme will also deliver new homes and public realm improvements as part of a mixed use, community focussed scheme.

Iceni Sustainable Development produced the sustainability statement which formed part of the application, assessing the performance of the development against the sustainable design and construction targets set by the Mayor of London. The analysis also provided evidence of the scheme's integration with the existing community, examining the development's impact on both healthcare and education in the area.





The Sustainable Development Scorecard

The National Planning Policy Framework (NPPF) has running throughout it the 'golden thread of sustainable development'. In spite of this, there is no clear-cut, NPPF-based assessment criteria to consider a site or project's sustainable development credentials, making current assessment processes both tricky and subjective.

The Sustainable Development Commission was established to address this recognised issue with our planning system. Made up of a balanced cross-section of industry professionals, the Commission has debated the issues and found solutions, culminating in the creation of the Sustainable Development Scorecard.

The Scorecard website is free to use and accessible to anyone with a vested interest in development, including developers, architects, planners, community groups and members of the public. By crystallising the NPPF's guidance into a simple, online analysis tool, the Commission aims to provide a more consistent approach to sustainable development, leading to a more sustainable built environment.

www.thescorecard.org.uk



Delivery | Design | Engagement | Heritage | Impact Management | Planning
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