

The Kingsfields: Sustainability Charter. Cambourne. Church Commissioners for England.

SUSTAINABILITY

CAMBOURNE SUSTAINABILITY CHARTER.

REVISION D - 13 DECEMBER 2021



SUSTAINABILITY CAMBOURNE SUSTAINABILITY CHARTER. - REV. D

Audit sheet.

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SUSTAINABILITY CAMBOURNE SUSTAINABILITY CHARTER. – REV. D

Executive summary

This Charter sets out the aspirations for The Kingsfields, the Church Commissioners' proposed new settlement at Cambourne in Greater Cambridgeshire.

This document ultimately aims to responds to this overall vision for the site, developed by JTP, the architects behind the masterplan, evolving opportunities into overarching commitments and priorities.

The document is designed as a 'live', dynamic instrument that aims to ensure the design team has the tools to translate the sustainability ambitions into tangible outcomes as they bring the vision for the Kingsfields to life.

The aspirations set out in this charter have been aligned to global and local agendas, contextualising the response to global challenges including the climate and ecological emergency and growing social and economic inequalities. It ultimately integrates the Church Commissioners' vision for the site.

The Charter has been structure around the Five Capitals framework, responding to the social, human, natural, physical, and economic dimensions of the masterplan. In this regards, **five interconnected outcomes were defined**, aiming to elevate the existing opportunities at the site and draw on the Church Commissioners responsible approach for strategic land development. Within each outcome, **three priority areas** have been defined to support the achievement of the outcome and sow the seeds for the way we will operate and bring this development to life. An overview of this structure and its components can be seen in Figure 1.

This charter has been developed at an early stage of the planning process, to set the aspiration for what The Kingsfields can achieve, while leaving flexibility for changes to be made as the design of the new settlement progresses to the later stages. Its integration with the architects' vision ensures that sustainability can remain fundamental to the proposal as it changes and evolves.



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Introduction

The Charter

This Charter sets out the sustainability aspirations for the Church Commissioners' proposed new settlement at Cambourne, known as The Kingsfields.

Setting an aspirational agenda is of great importance for The Kingsfields to become a regenerative, connected and future-proof place to live. The Charter responds to this vision, developed by JTP, the architects behind the masterplan and presented in *A Vision for The Kingsfields document*. It expands on the opportunities initially identified by JTP, which are evolved into overarching commitments and priorities.

It is structured around the Five Capitals framework to ensure an integrated and holistic approach to sustainability, whilst considering the emerging local planning policy within the emerging Local Plan and responding to the Church Commissioners' organisational values. Therefore, five outcomes and priority areas make up the content of the Charter, providing focus and direction to facilitate the integration of sustainability throughout the masterplan. An overview of these is presented in Figure 2.

The document is designed as a 'live', dynamic instrument that will evolve as required to respond effectively to changing expectations to keep commitments relevant and impactful. It aims to ensure the design team has the tools to translate the sustainability ambitions into tangible outcomes as they bring the vision for the Kingsfields to life.

About the site

Cambourne is located within the Oxford-Cambridge Arc and the UK Innovation and the Cambridge-Norwich Tech Corridor, which has implications for housing demand; the area is earmarked for significant economic development and housing growth by the government. The site comprises mostly agricultural land, extending to 401.7ha, and will be developed in line with its capacity.

The site is bisected by an existing A-road, the A428, which runs between Cambridge to the east and the A1 to the west. The larger area to the south will form Great Kingsfield, where homes, schools and other mixed-use development will sit within a regenerative and accessible green infrastructure network that incorporates existing trees and hedgerows. The northern part of the land will be divided into a smaller village, Little Kingsfield, as well as sections of employment land and an energy park that will produce renewable energy to be used on site. Great Kingsfield and Little Kingsfield will be connected by a bridge over the A428, for one cohesive settlement, and will also complement the wider environment, integrating with nearby villages and transport links such as the East West Rail (EWR) expansion.

Overall, the proposal for the new settlement looks to harness the character of the existing site and infrastructure, embedding sustainability at all levels and contributing to a more regenerative and connected Cambridgeshire.





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Our approach: Pathway to Sustainable Development

The aspirations for The Kingsfields have been aligned to the United Nations Sustainable Development Goals (UN SDGs) to contextualise the response to global challenges including the climate and ecological emergency and growing social and economic inequalities. Our strategic approach has framed the priorities of the charter within the local policy context, whilst integrating the Church Commissioners' vision for the site. These considerations are structured around the Five Capitals framework, responding to the social, human, natural, physical, and economic dimensions of the masterplan. A visual representation of this pathway can be seen below in Figure 2.



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Figure 2. Pathway to Sustainable Development

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The Five Capitals of sustainability

The sustainability aspiration for The Kingsfields is translated into five interconnected outcomes, which encompass factors related to physical, natural, social, human and economic capital (Figure 3), ensuring a response that addresses both climate change and health & wellbeing, and embraces a holistic and interconnected approach to sustainability.

This approach stems from our commitment to not only effectively manage the environmental impacts of the scheme but also capture the wider multi-faceted benefits that the development will bring to all stakeholders.

While the Charter's structure is split into five defined outcomes, we are committed to adopting a holistic interdisciplinary approach that maximises the synergies and co-benefits between topics.

Physical Capital

Creating high quality public realm enables the creation of PHYSICAL VALUE where buildings and infrastructure are resilient to climate change and neighbourhoods are highly functional and well connected.

By enabling community identity, SOCIAL VALUE is increased where a place is inclusive and diverse, co-created by the community and growing organically with their changing needs.

Economic Capital

By ensuring a participatory and dynamic system, ECONOMIC VALUE is increased where all community members feel a sense of ownership in the community and are motivated and able to contribute to it.

Human Capital

Through human-centric design, HUMAN VALUE is increased where health, happiness and wellbeing are embedded in the fabric of the new settlement, creating a sense of fulfilment for people.

Natural Capital

By seeking to restore and enhance the natural environment, NATURAL VALUE is increased where nature is protected, and resources are managed in a way which allows it to flourish in harmony with the built environment.



A FRAMEWORK FOR SUSTAINABLE DEVELOPMENT



Figure 3. Five Capitals Framework for Sustainable Development

NATURAL HUMAN

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Outcomes and Priority Areas

This Charter aims to enable the realisation of the proposal's aspirations for sustainable development, through design, construction and operation.

It has been is structured around **five interconnected outcomes**, which aim to elevate the existing opportunities at the site and draw on the Church Commissioners responsible approach for strategic land development. Within each outcome, **three priority areas** have been defined to support the achievement of the outcome and

sow the seeds for the way we will operate and bring this development to life. Figure 4 presents a summary of the Charter, including the capitals, outcomes and priority areas.

The following section addresses each outcome in turn, outlining and contextualising the aspiration, and highlighting opportunities for delivering these commitments through the lens of each priority area. These aspirations have been aligned to vision for the site, aiming to carving a pathway to sustainable development at The Kingsfields.

	PHYSICAL	SOCIAL	ECONOMIC	NATURAL
	Resilient Masterplan	Cohesive Communities	Inclusive Economy	Thriving Nature
Outcomes	A resilient and self-sustained new settlement which will endure into the future and give back to people and the environment, adapting to changing needs.	Diverse and inclusive communities that participate in and co-create their environment, establishing strong roots within it and supporting sustainable growth.	A regenerative and participative local economy which delivers accessible opportunities and affordable homes, now and into the future.	A new settlement embedded in nature and teeming with wildlife, where the community lives in harmony with the natural environment.
Priority areas	 Net-Zero carbon Climate change adaptation High quality public realm 	 Placemaking Social inclusion Engaging and empowering local communities 	 Housing access and affordability High quality work Sustainable jobs 	 Restoring natural habitats Green infrastructure development Efficient resource management

Figure 4. Outcomes and Priority Areas for the Charter



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Resilient Masterplan

A resilient and self-sustained new settlement which will endure into the future and give back to people and the environment, adapting to changing needs.

The outcome for a resilient masterplan aims to generate physical value through high quality infrastructure and built assets. This in turn, contributes to a low carbon future and mitigates the impacts of climate change, while providing a highly functional environment for people.

The site will capitalise on the opportunity to produce renewable, locally sourced energy which powers homes and a network of sustainable and connected transport, aligning with the ethos of emerging planning policies CC/RE and I/ST within the emerging Local Plan. This will contribute to The Kingsfields achieving net-zero carbon whilst enabling people to move easily via a network of sustainable and connected public transport.

The new settlement will adapt to climate change impacts, aligning with the ethos of emerging policy CC/DC and CC/FM, through extensive use of green infrastructure for urban cooling and sustainable drainage, which will reduce the risk of flooding and overheating into the future.

Lastly, The Kingsfields will conserve the character of the local area, integrating active farming and woodland into the new settlement. It will embracing co-location of services in community hubs, establishing high quality public realm as expressed in emerging policy GP/QP, and enabling the community to co-create a functional and self-sustaining environment.

Consideration for emerging local Planning Policy:

Climate Change

Policy CC/NZ: Net zero carbon new buildings

Policy CC/RE: Renewable energy projects and infrastructure

Policy CC/DC: Designing for a changing climate

Policy CC/FM: Flooding and integrated water management

Great Places

Policy GP/QP: Establishing high quality landscape and public realm

Infrastructure

Policy I/ST: Sustainable transport and connectivity

New Settlements

Policy S/CB: Cambourne





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Priority areas



Whole life carbon

• Significantly reduce embodied carbon through use of carbon budgets and completion of a whole life carbon assessment for the site, in line with the emerging plan for the local area.

Operational carbon

- Generate 100% renewable energy for the site through the on-site energy park and ensure energy efficiency of all buildings through comprehensive energy strategies which adopt a fabric first approach.
- Energy efficient, higher density homes come forward around the Education Campus and local centres.
- Energy generation: The proposed new settlement at The Kingsfields can exemplify the ability to generate and/or trade renewable energy locally, to meet the demands for power by homes and zero emission forms of transport across the new site of the area.



Climate change adaptation

Sustainable urban drainage

• Contribute to better water quality, higher biodiversity and increased resilience to flooding through SuDs solutions which are integrated with regenerative agricultural practices and habitat corridors of on the site.

Urban cooling

- Use of passive design measures such as embedding buildings within a network of green infrastructure, woodland conservation and enhancement, and tree planting, to mitigate the impacts of overheating.
- Create green corridors for landscape and nature to thrive.
- Create buildings that are resilient to climate change through use of materials: fabric and structure.
- Design an urban environment which is durable, minimising the risk of degradation.

Sustainable and connected transport

- Little Kingsfield.



High quality public realm

Conservation of heritage and local character

• Ensure a seamless blend of new and old by integrating forward thinking and future-proof design with historic character of the surrounding villages, agricultural tradition, and woodland areas.

• Create an interconnected and flexible transport system which prioritises active travel modes through dedicated walking and cycling networks and ensures ease of movement through use of transport hubs to connect high quality public transport.

• Bridge connection over the A428 along with transport hub in

Active neighbourhoods

• Co-location of services in community hubs, and focus on shared spaces and neighbourhood co-creation, which encourage community interaction strengthen the roots of the place.

• Create neighbourhood micro-economy with micro mobility.

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Cohesive Communities

Diverse and inclusive communities that participate in and co-create their environment, establishing strong roots within it and supporting sustainable growth.

The outcome for cohesive communities aims to generate social value by creating a place that enables everyone in the community to participate in activities and interact with others, while retaining their individual identity and helping to co-create the environment they live in.

The design of The Kingsfields harnesses the opportunity for organic growth, creating a settlement where people congregate around community hubs, and interactive nature networks and community growing areas are woven through the fabric of the site. This flexible and diverse structure will provide a multitude of opportunities adapting to people's needs, and serving a wide range of lifestyles and situations, striking a balance between cohesion and diversity.

The site aims to accommodate for diverse needs through the provision of different housing typologies and a variety of spaces and places for public access, aligning with the ethos of emerging planning policy H/HM.

The Kingsfields will be co-created with the community, engaging them in pop-up consultation events where they can contribute to regeneration of nature on the site. The landscape will be formed around *Agri hoo*ds which enable continued participation in nature restoration, while providing opportunities for community interaction, learning and sharing, and engagement with nature, as is the ethos of emerging policy WS/HD.

Consideration for emerging local Planning Policy:

Wellbeing and social inclusion

Policy WS/HD: Creating healthy new developments

Great Places

Policy GP/QP: Establishing high quality landscape and public realm

Homes

Policy H/AH: Affordable housing

Policy H/HM: Housing mix







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Priority areas



Placemaking

Organic growth

• Ensure a flexible masterplan designed around community hubs and residential clusters which enable the new settlement to grow with people's changing needs while retaining the unique roots and character created by the existing community.

Accessibility to public recreational space

- Design the landscape for community members to access varied recreational spaces, through provision of amenity greenspace, shops and cafes.
- Create communities around Agrihoods, where production of food is embedded into the local character of the area.



Social Inclusion

Diverse Land Use

• Provide a variety of spaces and hubs open to the community, where people from different generations and backgrounds can meet, interact and access services while forming strong connections with other community members and their environment.

Diverse housing typology

- Provide high quality housing of different sizing, price points, character, and design, to suit a variety of lifestyles and situations, which are integrated together into a cohesive new settlement.
- Commit to the Church's statement to deliver affordable and quality homes for all types and tenures with a local character of the area.

Engage with the community through consultation processes that provide opportunities to participate through nontraditional channels such as rewilding and community planting events, where people can participate in co-creating and regenerating The Kingsfields.

Fostering a sense of place and belonging

placemaking.



Engaging & empowering local communities

Diverse Community Engagement

Facilitate continued co-creation of the environment by the community, through the integration of Agrihoods where people can actively participate in ongoing nature recovery, develop a local microeconomy, grow their own food, share knowledge and socialise together.

Places with increased interaction, visibility of local facilities and services, a better mix of uses and people-focused

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Inclusive Economy

A regenerative and participative local economy which delivers accessible opportunities and affordable homes, now and into the future.

The outcome for an inclusive economy aims to generate economic value by providing housing which is affordable for many people, and setting the conditions for a self-sufficient microeconomy to develop and grow, stimulating local enterprise and providing good quality jobs.

The Kingsfields will contribute greatly to alleviating the housing crisis through provision of affordable and good quality housing of different types, helping meet the needs of diverse people and encouraging social inclusivity.

The site aims to harness the potential of the agrihood concept to provide diverse job opportunities in multiple sectors including hospitality, research and tourism, and a wide range of vocational training and learning opportunities associated with these industries. The Kingsfields communities will have the opportunity to develop their own microeconomy around the food that they grow together, increasing the resilience of the local economy.

The structure of The Kingsfields will provide flexible working and workspace, aligning with the ethos of emerging planning policies J/AW and J/AW, through the connectivity of the development combined with provision of flexible workspaces, which will enable the community to work in a way that suits their needs.

Consideration for emerging local Planning Policy:

Jobs

Policy J/AW: Affordable workspace and creative industries Policy J/RW: Enabling remote working **Homes** Policy H/AH: Affordable housing

Policy H/HM: Housing mix













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Priority areas



Housing access & affordability

Provision of affordable housing

• Provide truly affordable housing enabling a more diverse group of people to settle in the area.

Enhancing housing supply

• Provide houses of all types and tenures. Contribute to the need for additional housing particularly in areas of economic growth, to alleviate the housing crisis.



Quality employment creation

- Create opportunities for well-paid jobs in the community, founded in a food based economy which involves independent cafes and restaurants, farmers markets, agri-innovation and micro-mobility solutions for produce, and encourages the development of agritourism in the area.
- Create opportunities for a network society across Cambridgeshire with increased collaboration, creating local food cooperatives.
- Increase the opportunities for smart farming via sustainable food systems, soil culture and nourishment and provide incentives to invest in smart energy and waste systems and zero carbon energy technologies.

Diverse employment

- Ensure that job opportunities in the local economy are available through diverse routes, for example vocational training and knowledge sharing provided by the agri-innovation and research sector, and workspaces which cater to start-ups and selfemployment.
- Through the provision of community farmlands, give residents the chance to increase their land equity and benefit from the collective decisions facilitated through associationism and long-term stewardship.
- Enable the community to grow a variety of fruits and vegetables, which can be exchanged by setting up a local system of barter.

internet in homes.

Shared and affordable workspaces



High quality work

High speed broadband provision

• Facilitate home working, entrepreneurship, and flexible working practices through the provision of high-speed

• Support the community through flexible office spaces and creative workspaces which are accessible at an affordable rate and allow community interaction through the use of shared space.

Flexible working

• Enable community members to work in a way that suits their needs and encourages balanced lifestyles by integrating flexible office and workspaces within walking distance of both homes and greenspaces.

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Thriving Nature

A new settlement embedded in nature and teeming with wildlife, where the community lives in harmony with the natural environment.

The outcome for thriving nature aims to generate natural value. This means the creation of an environment where the community actively engages with nature, interacting with the natural world on a day-to-day basis.

The site aims to capitalise on its unique context to bring an interconnected natural network which provides habitat for wildlife, providing enhanced biodiversity benefits. It will also explore opportunities to set in place plans for maintaining the habitats created onsite. It will ensure residents and visitors can access nature at its doorstep, by providing high quality green spaces alongside the site.

The Kingsfields will restore and connect existing woodland, through tree planting initiatives, harnessing the power of nature to create a more pleasant environment that provides benefits such as pollution and noise reduction.

By promoting regenerative agriculture activities and encourage responsible use of natural resources, the site will activate an environment where people and nature will thrive in harmony.

Consideration for emerging local Planning Policy: Climate Change Policy CC/CS: Supporting land-based carbon sequestration Biodiversity and Green Spaces Policy BG/BG: Biodiversity and geodiversity Policy BG/GI: Green infrastructure New Settlements

Policy S/CB: Cambourne













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Priority areas



Restoring natural habitats

Biodiversity net gain

• Embed neighbourhoods in an enriched landscape of farms, greenspaces and woodland which promote water quality and soil health, provide habitat for wildlife and engage the community.

Maintaining habitats

• Put in place plans to maintain habitat created on-site for at least 30 years as per the forthcoming Environment Bill, focusing on active practices such as regenerative agriculture which can continue to support nature as the foundation of the local economy.



Green infrastructure development

Diverse and engaging green spaces

• Provide high quality green spaces which can be used by the community for varied purposes such as food growing and walking, providing opportunities for social interaction, education and exercise.

Habitat connectivity

- Ensure that natural features and green spaces are linked up to form green corridors that provide walking paths for people and resilient habitats for wildlife, for example by connecting tree clusters through planting initiatives.
- Develop the East-West Wood, a major new tree planting initiative that will create a wildlife corridor and a buffer along the new road A428.

agriculture.



Natural resource efficiency

Water efficiency and management

• Implement water saving practices to minimise water waste through efficiency measures and reuse, e.g., rainwater harvesting, and water management practices which form part of agri-innovation and smart

Waste reduction and management

• Minimisation of waste using the waste hierarchy and circular economy principles, avoiding waste in the first instance, reusing and recycling wherever possible and using landfill only as a last resort, enabled through proper segregation of waste on-site.

Land-based carbon sequestration

• Embedding nature-based solutions throughout the site to maximise areas of vegetation and regenerative land use and promote use of natural materials.

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Healthy and Active Lifestyles

A design which promotes a positive environment where people engage every day with nature and other activities beneficial to mental and physical health & wellbeing.

The outcome for healthy and active lifestyles aims to generate human value by enabling active lifestyles and providing high-quality spaces which puts health at its core.

The Kingsfields will be designed as a collection of walkable neighbourhoods connected by a network of public transport, encouraging people to move around on foot. Green corridors will provide aesthetically beautiful walkways and cycleways, which also create shading and limit exposure to pollution.

From community farming, to the provision of community hubs and educational facilities, the site aims to create high quality environment for people to connect with others, engage with educational activities and live a healthy life, physically and mentally.

Alignment with emerging local Planning Policy: Wellbeing and Social Inclusion Policy WS/HD: Creating healthy new developments Biodiversity and Green Spaces Policy BG/GI: Green infrastructure

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THE KINGSFIELDS:

SUSTAINABILITY CHARTER CHURCH COMMISSIONERS FOR ENGLAND

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Priority areas



Active Mobility

Public transport accessibility

• Provision of a network of public transport links which are connected with dedicated walking or cycling routes and with other urban centres, and which enable use by those who require additional accessibility features.

Active travel measures

• Implement public realm design which features vegetation, water fountains and seating along cycleways and footpaths, and which ensures essential and recreational facilities can be reasonably reached by all households through active travel.



Healthy spaces

Integrated community food growing

• Embed various sized allotments and areas of regenerative agriculture, and facilitate a system for community members to buy, sell and share food which is grown here through e.g., space to house a co-operative.

Environmental quality

- Consider microclimate quality in public realm design to provide an environment with adequate levels of sunlight, shading and protection from excessive wind, and limit air pollution.
- Reduce air pollution through an all-electric transport system, encouragement of active mobility and vegetation buffers.

Educational facilities

• Locate primary and secondary education facilities within walking or cycling distance of all households and include facilities for vocational and creative training and informal education, such as libraries and arts centres, within the new settlement.



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