locality

Yarnfield and Cold Meece Parish Council

Design guidance and codes

2023

Quality information

Prepared by	Checked by	Approved by
John-Michael Chidwick	Wei Deng	Ben Castell
Graduate Urban Designer	**Associate Urban Designer**	**Director;**
		John Fraser
		Parish Clerk, Yarnfield and Cold Meece Parish Council

Revision History

Revision	Revision date	Details	Name	Position
2	10/07/23	Second Draft	Wei Deng	Associate Urban Designer
1	24/06/23	Prepare First Draft	Wei Deng	Associate Urban Designer

Contents

Introduction

01

Yarnfield and Cold Meece Parish Council is in the process of preparing the Neighbourhood Plan, a document which will guide development within the village.

1.1 Objectives

Local communities can use neighbourhood planning as a means of changing their neighbourhoods for the better. Through Locality's support programme, Yarnfield and Cold Meece Parish Council have appointed AECOM to undertake a study of the Yarnfield and Cold Meece Neighbourhood Plan Area. AECOM has been commissioned to provide a Design Code document, which will provide urban design guidance to help to deliver good quality places within Yarnfield and Cold Meece.

1.2 Process

The purpose of this report is to provide design principles and codes for Yarnfield and Cold Meece, which can be applied to future development within the Neighbourhood Plan Area.

STEP 1

Inception meeting between AECOM representatives and the Steering Group;

STEP 2

Urban design and local character analysis;

STEP 3

Preparation of the design principles, guidelines and codes to be used to inform the design of the Neighbourhood Area and future developments;

STEP 4

Draft report with design guidelines and codes;

STEP 5

Submission of a final report.

1.3 Area of study

Yarnfield and Cold Meece civil parish is a small rural area in the English county of Staffordshire. The civil parish has a population of about 2,145 people (2021 census data) and covers an area of about 3.51 square kilometres. The region is best known for its agricultural heritage, and the part it played during World War II as the site of a Royal Ordnance facility at Cold Meece and as the central location for the United States Air Force. Both of which have had a significant impact on the two villages we see today.

Yarnfield and Cold Meece are nestled in the Staffordshire countryside, surrounded by rolling hills and picturesque scenery. Despite its small size, Yarnfield and Cold Meece is a vibrant community, with a range of local businesses and community groups providing services and activities for residents and visitors alike. The area is also well-connected, with easy access to nearby towns and cities such as Stafford and Stoke-on-Trent.

Figure 01:
A view of Yarnfield Park Training & Conference Centre

Figure 02:
Typical street view of Yarnfield

Figure 03: Study area plan

1.4 Planning policy and guidance

1.4.1 National Planning Policy Framework (2021)

The National Planning Policy Framework (NPPF) outlines the Government's overarching economic, environmental and social planning policies for England. The policies within the NPPF apply to the preparation of local and neighbourhood plans, and act as a framework against which decisions are made on planning applications.

The Revised NPPF states that a key objective of the planning system is to contribute to the achievement of sustainable development, which will be achieved with reference to three overarching objectives. One of these is an environmental objective, which seeks to contribute to protect and enhance the natural, built and historic environment.

The parts of the NPPF which are of relevance to this Design Code are:

- Part 7 (Ensuring the vitality of Parish centres)
- Part 12 (Achieving well-designed places)
- Part 13 (Protecting Green Belt land)
- Part 15 (Conserving and enhancing the natural environment)

On September 5, 2023, the Secretary of State for Levelling Up, Housing, and Communities issued an update to the NPPF, last revised in 2021. The primary amendments pertain to addressing climate change, flooding, and coastal challenges, offering guidance to decision-makers on utilizing and enhancing existing renewable energy sites.

National Design Guide 2019

Supports the ambitions of the NPPF to utilise the planning and development process in the creation of high-quality places, and Buildings, Resources and Lifespan.

Environment Bill (2020)

Any new development should be designed with its contribution to the Bill's aims and targets safeguarding nature, tackle climate change and providing comfortable living to the residents, achieving high levels of sustainable development.

A Green Future: Our 25 Year Plan to Improve the Environment (2018)

Calls for an approach to agriculture, forestry, land use and fishing that puts the environment first.

Any new development in Yarnfield and Cold Meece should be proposed in the context of the Country's aim for the next 25 years to achieve greener and cleaner environment and tackle climate change.

Guidance on the law affecting Habitats Sites, protected species and SSSIs

Guidance to Planning Authorities on the need to consider the potential impacts of development on protected and priority species, and the scope to avoid or mitigate any impacts when considering site allocations or planning applications.

National Planning Practice Guidance Natural Environment

Paragraphs 10–35 set out responsibilities regarding protected and priority species and habitats; 'proportionate' information and assessment required on biodiversity impacts at all stages of planning development; local ecology networks and nature recovery networks; application of mitigation hierarchy, net gain metrics, and promotion of woodlands.

Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015

Requires the Council to maintain (or bring) its tenanted non-domestic properties to a minimum energy efficiency of EPC level E by 2023. The Government may raise the minimum standard over time to EPC level C. The proposed investment will include tenanted properties and will bring any remaining sub-standard buildings well above the minimum compliance level.

Future Homes Standard (FHS) 2025

To be introduced in 2025, this standard will, "future proof new build homes with low carbon heating and world-leading levels of energy efficiency." This means that from 2025, new build homes will no longer be permitted to have fossil fuelled (e.g. gas, oil etc.) space heating and hot water generation. The hotter summers projected to result from climate change will increase the risk of overheating in new homes over their lifetime.

Committee on Climate Change (CCC)

The report made further recommendations for tighter low carbon standards for new build and rented properties, greater support for the uptake of low carbon heat and policy to incentivise able-to-pay energy efficiency improvements.

Future Buildings Standard (FBS)

In January 2021, MHCLG published the FBS Consultation, setting out energy and ventilation standards for non-domestic buildings, proposing changes to the Building Regulations from 2021 onwards, to be implemented in 2025. The intent is for non-domestic buildings to transition to low carbon heat sources for space heating and hot water, such that they can become zero carbon as the Grid and heat networks decarbonise.

Building Regulations Part L 2021

In late 2019 and early 2020, the Government consulted on the uplift standards to Part L, as the first step in achieving the FHS and FBS. The new standards should result in a 31% reduction against the current standards. Option 2 (fabric plus technology) will require improved fabric u-values, low temperature radiators, wastewater heat recovery and PV.

Planning (Listed Buildings and Conservation Areas) Act 1990

This legislation sets out the principal statutory provisions that must be considered in the determination of any application affecting listed buildings and conservations. It establishes that special regard to desirability of preserving the building pf tits setting and the desirability of preserving or enhancing the character and appearance of a conservation area.

The Ancient Monuments and Archaeological Areas Act 1979

This legislation imposes a requirement for Scheduled Monument Consent for any works of demolition, repair and alteration that might affect a designated Scheduled Monument.

1.4.2 Local Planning Policy context

The Stafford Borough Local Plan 2011-2031, which was adopted in 2014, is a document that outlines the borough's long-term strategy for land use and development. One of the plan's primary goals is to promote high design quality across all new development. To that end, the plan establishes clear design policies, such as guidelines for material use, building heights, and the integration of new development with the surrounding environment. The plan also requires developers to submit design statements and collaborate closely with the council to ensure that new development designs are appropriate and of high quality.

Overall, the Stafford Borough Local Plan demonstrates the council's dedication to promoting high-quality design and creating sustainable and appealing environments for residents.

The upcoming Stafford Borough Council Local Plan 2020-2040 recognises the importance of good design in creating appealing, sustainable, and successful places. It includes policies that require all new development to meet certain design standards, such as ensuring that buildings are well-proportioned, use high-quality materials, and are designed to be energy-efficient and accessible, in order to achieve this goal. Green roofs, rainwater harvesting, and renewable energy systems are among the innovative and sustainable design solutions encouraged by the plan. It also promotes the use of public art and the inclusion of green spaces in new developments.

Supplementary Planning Documents

The Borough Council has prepared Supplementary Planning Documents to provide more detailed guidance on policies or proposals in the Local Plan (SPDs). SPDs do not contain new policies, but rather supplement the policies in the adopted Plan for Stafford Borough by detailing how the policy will be implemented.

The Adoption Statement confirms that the Council has now adopted the SPDs listed below.

- The Design SPD: It was adopted by full Council on April 24, 2018.
- The Shop Fronts and Advertisements SPD: On April 24, 2018, it was adopted by full Council.

Neighbourhood Plan

On August 5th, 2021, Stafford Borough Council approved and designated the Yarnfield and Cold Meece Neighbourhood Plan Area. The Parish Council proposed the Neighbourhood Plan based on the parish boundary and submitted a map and statement outlining their intentions. It presents an opportunity for the local group to establish a level of specificity that caters to the local area. Upon approval, the plan will coexist with Stafford Borough Council's Local Plan, granting the local people some degree of autonomy in regulating local development. This allows local communities to significantly influence the future development of Yarnfield and Cold Meece Parish up to 2040.

1.5 Process and Engagement

This section provides a brief chronological breakdown of the key elements and milestones used throughout the duration of the production of this document.

Inception Call with Steering Group

An inception call with the Steering Group allowed AECOM to confirm the brief and programme of works.

Site Visit

A meeting on site, including a walkover of the Parish's key areas was conducted on the 22nd November 2022 along with representatives of the Neighbourhood Plan Group. A drive around areas of the wider Neighbourhood area was also conducted by consultants to appraise local character and key features informing its sense of place.

Neighbourhood Plan Area Baseline Analysis

02

2. Neighbourhood Plan Area Context Analysis

2.1 Historic growth

The villages were primarily agricultural in the early twentieth century, with structures such as barns, farmhouses, with some military camps dominating the landscape. Duncan Hall, Beatty Hall, and Howard Hall were built in 1938 for munitions workers transferred from Woolwich Arsenal to the Royal Ordnance factory in Cold Meece. During World War II, they were occupied by the United States Army Air Force.

Cold Meece was used to house personal at the Royal Ordnance Factory. It was also the location for a large railway station used to transport workers to the factory during World War II. The sites of Duncan Hall, Beatty Hall and Howard Hall have now been used to build new houses and estates in Yarnfield. Since 2011 Yarnfield has been a 57% increase in the number of homes.

Today, the villages retain a mix of older and newer structures, reflecting the area's changing needs and demographics over the last century.

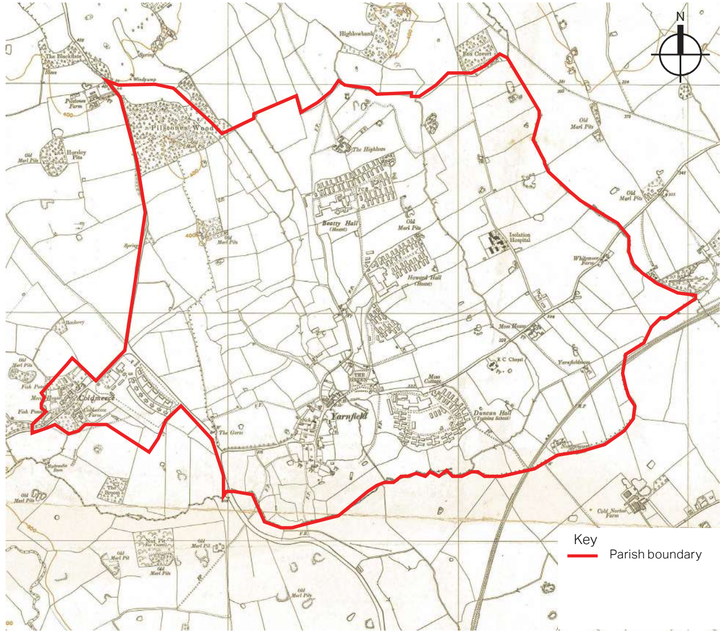


Figure 05: Yarnfield and Cold Meece historic map in 1955

2.2 Street Network

The street network in Yarnfield and Cold Meece Parish is primarily made up of small roads and rural lanes. The M6 runs along the parish's eastern boundary.

The main road within the parish include Yarnfield Lane, which runs through the centre of Yarnfield village and connects to Stone. Swynnerton Road, which runs along the western boundary, is the main road in the area providing links to Swynnerton and Eccleshall.

The tertiary street network in Yarnfield and Cold Meece Parish's is relatively well-kept on the newer housing estates in the parish. However, because many of the roads are narrow, traffic congestion can be a problem during peak times, particularly in and around Yarnfield village centre. The use of Yarnfield Lane as a 'rat run' by out-of-parish vehicles significantly increases the number of vehicles passing through the parish.

Maintenance of Yarnfield Lane and the older tertiary streets in the centre of the village show signs of significant deterioration due to under investment by local councils.

Regular bus services, including routes 102/102A, running along main roads connecting Yarnfield and Cold Meece to Stone.. Direct public transport links to Stoke on Trent and Stafford were stopped in 2020. Special bus routes are provided for school children to access Alleyne's Academy in Stone.

Figure 06:
A typical main roads crossing parish

Figure 07:
A typical tertiary street view

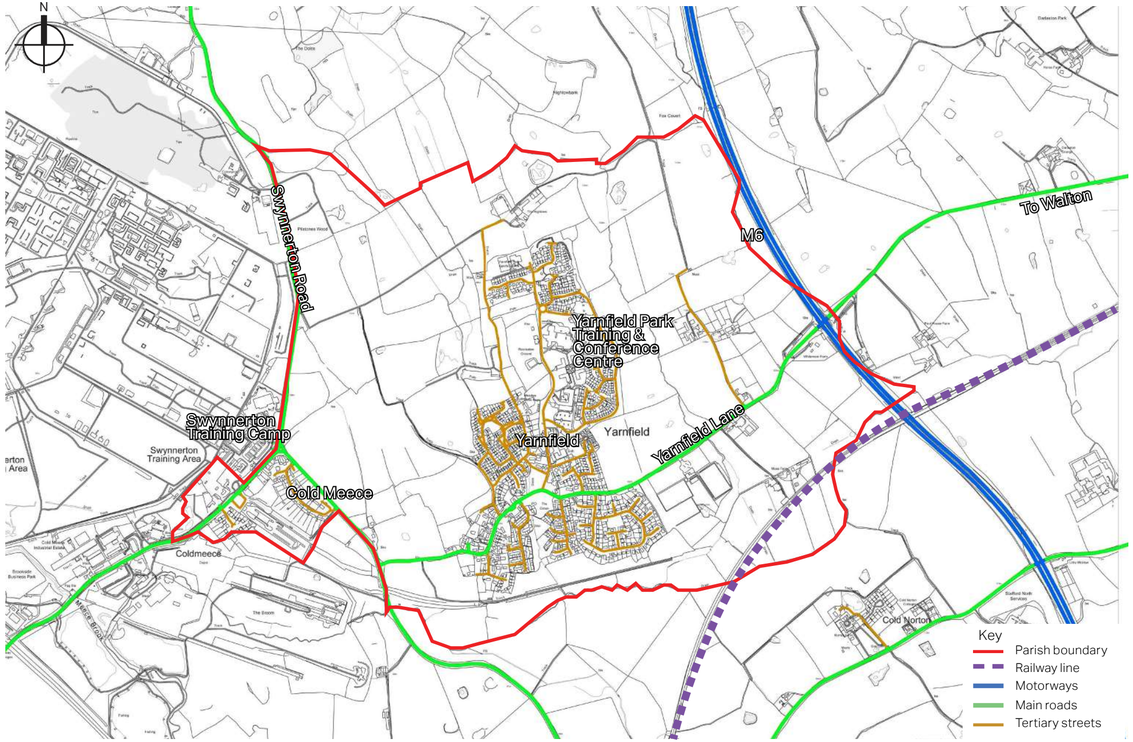


Figure 08: Movement network Plan

2.2.1 Pedestrian, cycle and bridleway connectivity

Yarnfield and Cold Meece parish has a network of footpaths, cycleways, and bridleways that run through the area, making it popular with pedestrians, cyclists, and horseback riders. These pathways allow locals and guests to explore the parish's rural areas and communities while also offering a beautiful and healthy alternative to driving.

There are several pathways in Yarnfield that connect the communities, making facilities and services accessible to walkers. The villages of Yarnfield and Cold Meece are not well connected for pedestrians and cyclists: public footpath 10 does not have an all-weather surface and can at times be difficult to use, and there is no safe walkable road connection.

Yarnfield is the start of the "Stone Circles Walk," a 53 km circular route linking other villages in the area. There are also a number of well-liked circular walks in the region, including the Trentham Gardens walk, which is a popular destination for families, and several circular walks in the parish that lead walkers through the picturesque countryside.

The parish is close to National Cycle Route 5 at Stone, which gives access to the wider cycle network and provides experienced riders with a wide variety of cycling opportunities.

The parish council has submitted plans to Staffordshire County Council to create a greenway linking Yarnfield with the neighbouring town of Stone. A decision on the application is expected in early 2024.

Figure 09:
A foot path crossing green spaces in the village centre

Figure 10:
A long distance recreational route

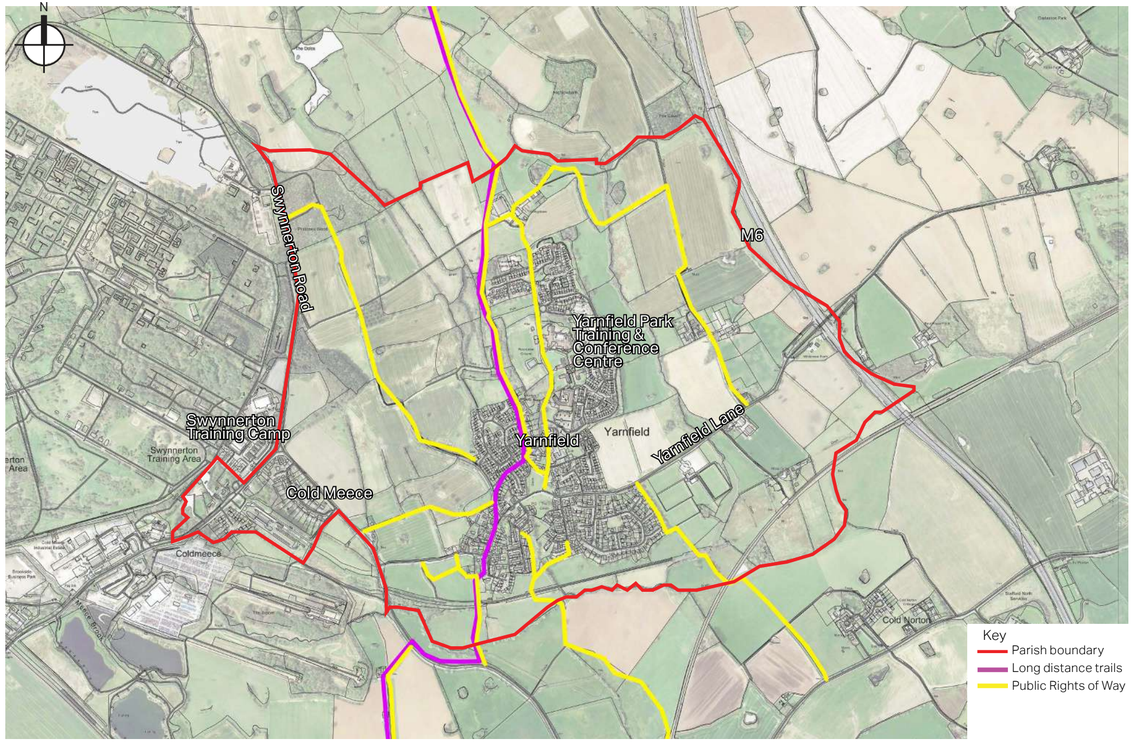


Figure 11: Map showing the non-vehicular in Yarnfield and Cold Meece

2.3 Heritage Assets

The parish of Yarnfield and Cold Meece contains a number of heritage assets, including listed buildings and other non-statutory assets of historical and cultural significance.

Listed Buildings

The Grade II listed Boundary Cottages and Elton Cottage are one of the parish's most notable heritage assets. The buildings are one storey with attics, colour washed brick with tiled roof. Originally the building was a four bay open hall house of cruck framed construction.

Yew Tree Farm in Yarnfield, a Grade II listed building is a converted timber-framed brick barn with some exposed timber frame on the west side.

A range of outbuildings adjoining the north-east side of Meece House is another important grade II listed building which consists of a range of 3 blocks, the end block with gable to road, red brick and cement rendering.

The Grade II listed Cold Meece War Memorial: an eloquent witness to the tragic impact of world events and the sacrifices made in the First World War. Architectural interest: an elegant and well-carved Celtic cross.

Figure 12:
Yarnfield conference centre

Figure 13:
Yew tree farm building

Other Heritage Assets

The parish also has a number of non-statutory heritage sites, including the Yarnfield Village Hall, the former St Barnabus Church and the white house on Yarnfield village green.

The heritage assets in Yarnfield and Cold Meece parish compliment the area's rich history and cultural heritage. They continue to be a significant component of the community's identity today and serve as a reminder of the area's rural heritage.

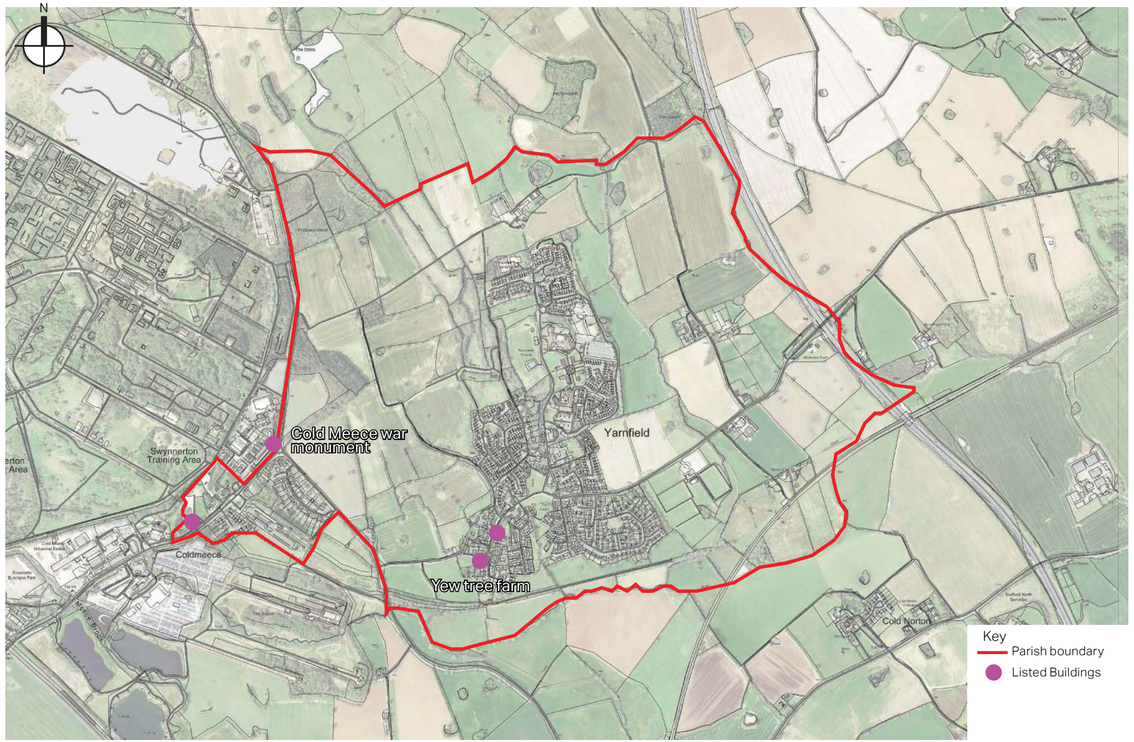


Figure 14: Map showing the heritage assets in Yarnfield and Cold Meece villages.

2.4 Green Belt and Green Infrastructure

The parish of Yarnfield and Cold Meece is located within the North Staffordshire Green Belt, which is a designated area of land that surrounds the city of Stoke-on-Trent and other urban areas to prevent their expansion and protect the countryside. This means that the area is largely protected from development, which contributes to the preservation of its rural character and natural beauty. The Green Belt designation also provides opportunities for outdoor recreation and important wildlife habitats. As such, it is a valuable asset to the local community, contributing to the high quality of life enjoyed by Yarnfield and Cold Meece parish residents.

The parish of Yarnfield and Cold Meece has a variety of Green Infrastructure, including Yarnfield Common in the centre of Yarnfield village, Greenside playground, Yarnfield Park Multiple Games Area, and other smaller areas of green spaces. The Wellbeing Park football ground, which has five pitches is located on Yarnfield Lane.. The beautiful Staffordshire countryside surrounds the area, providing residents with easy access to scenic walks, cycle routes, and bridleways.

The presence of these Green Infrastructure encourages physical activity and outdoor recreation, providing residents with an important resource for staying healthy and enjoying the natural environment.

Figure 15:
View 1: A view of Yarnfield central park

Figure 16:
View 2: A view of countryside around Yarnfield village

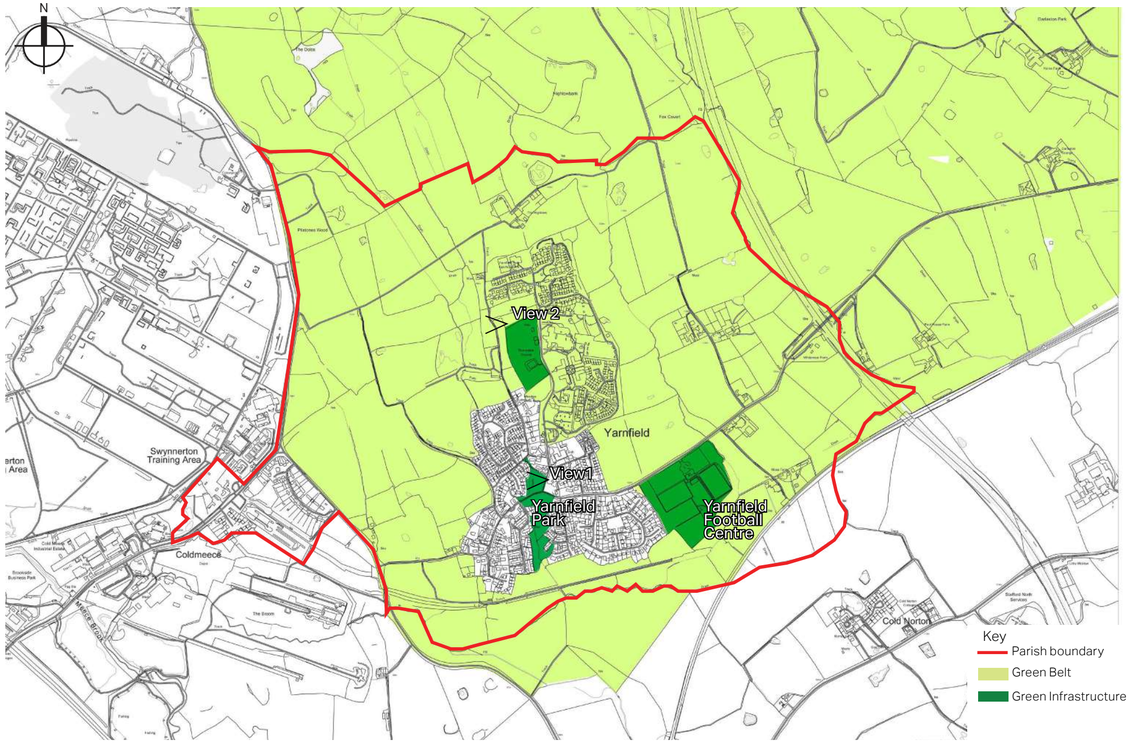


Figure 17: Green Belt and Green Infrastructure

2.5 Environmental Assets

Yarnfield and Cold Meece parishes are home to a variety of woodland habitats, including Ancient and Semi-natural Woodlands at Pilstones Wood. These woodlands have been present in the area for centuries and play an important role in biodiversity support, providing habitat for a diverse range of plant and animal species. Ancient Woodlands have existed continuously since at least 1600 AD and are widely regarded as the most valuable type of woodland habitat. These woodlands have a complicated structure and a diverse range of plant and animal species that have evolved over time. Semi-natural woodlands, on the other hand, have been influenced by human activity, such as selective felling and coppicing, but are still regarded as having high ecological value. They contribute to the area's distinct character and serve as important wildlife habitats. As such, they are an important resource for the local community and are critical to preserving the area's high quality of life

The UK government has established two important inventory systems to monitor the state of these woodlands and the species they support: the National Forest Inventory (NFI) and the Priority Habitat Inventory (PHI). These inventory systems in Yarnfield and Cold Meece parish have highlighted the importance of these woodlands for the survival of many rare and endangered species. Efforts are being made to protect these woodlands and restore areas damaged by human activity such as agriculture and development. More details about species and habitat can be found at Stafford Ecological Record website.

Figure 18:
View 1: Dense woodland in Yarnfield

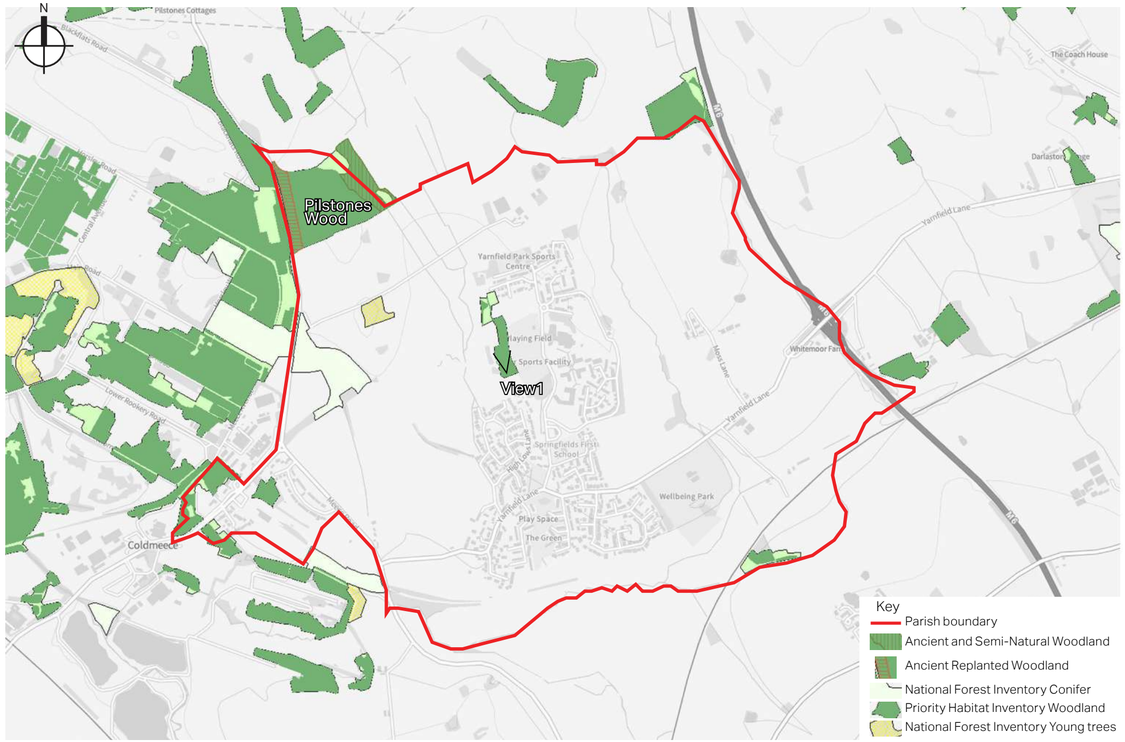


Figure 19: Environmental Designation

2.6 Water and Flood Risk

Yarnfield and Cold Meece parish is prone to flooding. Several water courses in the area put local residents at risk of flooding. Yarnfield Brook and ditches run through the area, posing a flood risk to Yarnfield village's central areas and the northwestern part of the community.

Larger surface water flood risk areas cover the parish's southern boundary but avoid residential areas. Combined surface water foul drainage systems in part of Yarnfield village are at capacity and are prone to localised flooding during periods of high rainfall. These areas are similar to water course flood risk areas.

Mitigation work by the Environment Agency to the north of Yarnfield village has reduced the risk of future flooding from Yarnfield Brook and Yarnfield Brook West.

Despite the risk of flooding, the area's water courses provide important wildlife habitat and contribute to the landscape's natural beauty. As such, they are a valuable community resource and are protected by environmental laws.

Figure 21:
A water course runs through village central green areas

Figure 22:
Surface water flood risk on long a distance recreational route

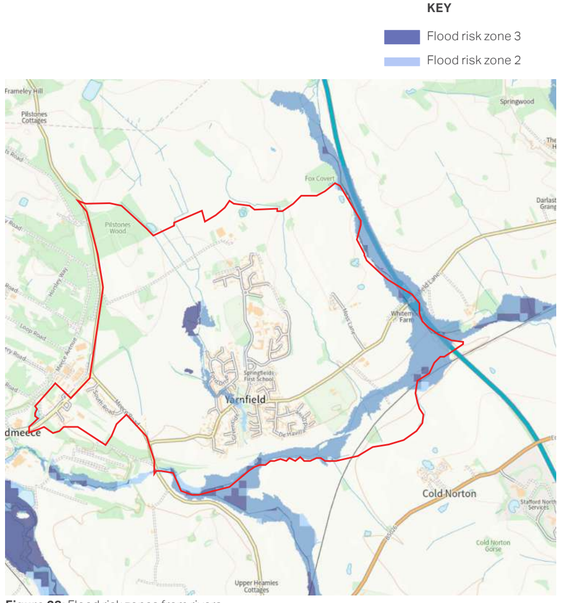


Figure 23: Flood risk zones from rivers

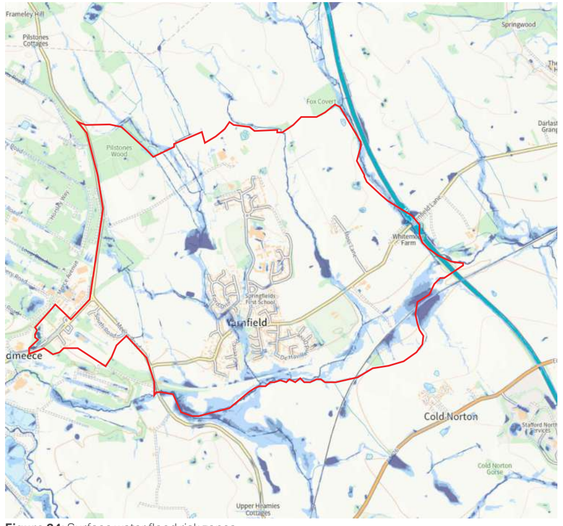


Figure 24: Surface water flood risk zones

Focus Areas

03

3. Focus Areas

According to the baseline study and given the size of the Neighbourhood Plan area, it is proposed to divide the characteristics into two main categories: Countryside Focus Area (CFA), and Settlement Focus Areas (SFA).

Countryside Focus Areas (CFA)

Settlement Focus Areas (SFA)

3.1 Defining the Focus Areas

In the settlement area of Yarnfield and Cold Meece, various focal points can be distinguished that have their own distinct sense of place based on their physical attributes, functionality, or identity.

Identifying these focus areas allows for a better understanding of the unique qualities of each space, and enables specific opportunities and issues to be discussed and addressed through more targeted guidance and design coding.

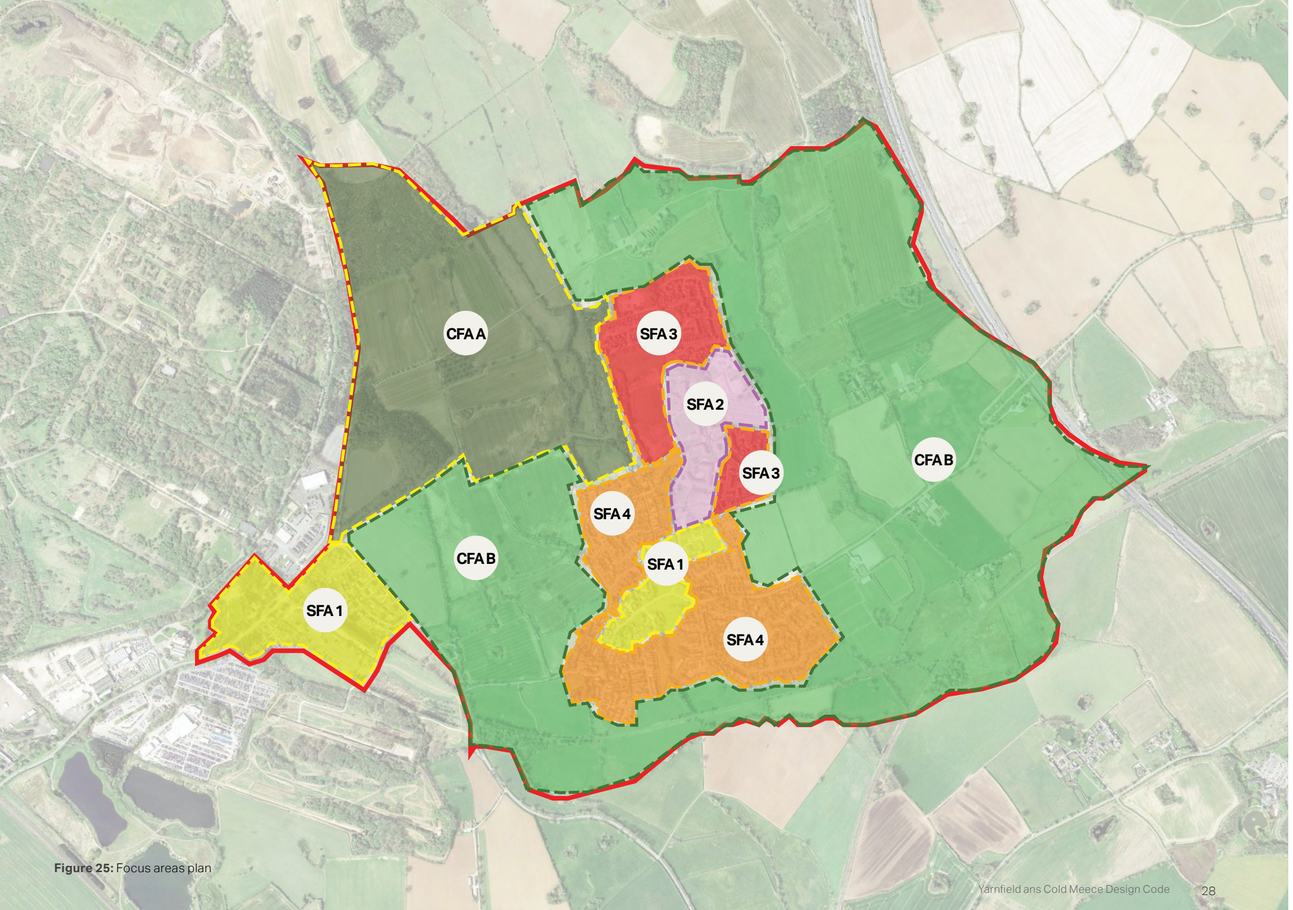


Figure 25: Focus areas plan

Settlement Focus Areas (SFA)

The landscape is primarily made up of small, charming villages and farms.

SFA 1: Historic villages

The original settlement of historical Yarnfield and Cold Meece villages

SFA 2: Yarnfield Park

The established conference and training area

SFA 3: New communities

Residential developments in the 2010s are located west of Yarnfield

SFA 4: Yarnfield South

Communities grew around the historic core throughout the 20th century after the Second World War

Countryside Focus Areas (CFA)

In most of the Neighbourhood Area, the countryside is visually stunning, featuring a combination of impressive landscapes, architecturally and historically significant buildings, and ecologically important areas.

CFA A: Woodland and designations

The areas are dominated by woodland-covered green fields with species-rich environmental designations

CFA B: Open Countryside

The open countryside surrounding Yarnfield forms the Green Belt around the villages

1 Settlement Focus Area 1: Historic Villages

The Historic Village focus areas include the center of Yarnfield village and the developed sections of Cold Meece. These areas showcase the historical emergence of the villages, with the historic buildings and features likely still preserved without significant changes.

Factors	Appearance characteristics
Building types	While there are various dwelling typologies throughout the oldest areas of the villages, detached dwellings are the dominant building type.
Building height	Dwellings range between 1.5 and 2 storeys. However, 2 storeys is the prevailing building height along Yarnfield Lane around the village centre.
Materials	Facades: Red brick; white render Roofing: Grey pantile or clay tiles
Boundaries	Hedgerow dominating with some red brick dwarf wall
Setbacks	Dwellings exhibit a variety of setbacks, generally large front gardens
Roofscape	Gable ends and pitched roofs dominate the roofscape in Yarnfield central areas. Simple pitched roofs are wide used in Cold Meece with several dwellings also exhibit dormers and projecting gable-ends.
Public realm	Two-sided tarmac paving for most streets in Yarnfield. Notable public spaces including footpaths and green spaces. Narrow public footpaths are found in Cold Meece.

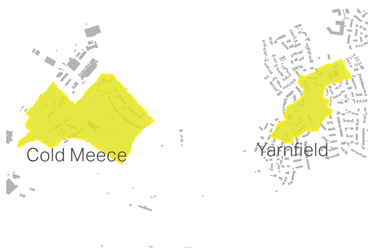


Figure 27: Location and figure ground plan of historic villages focus areas in Yarnfield and Cold Meece

Figure 28: A village pub along Yarnfield Lane

Figure 29: View of junction at Yarnfield Lane and High Lows Lane

Figure 30: View of buildings along Meece Road

Figure 31: View of buildings at The Woodlands

2 Settlement Focus Area 2: Yarnfield Park

The Yarnfield Park focus area comprises the Yarnfield conference and training centre along with its associated green spaces, car parking court, and accommodation blocks.

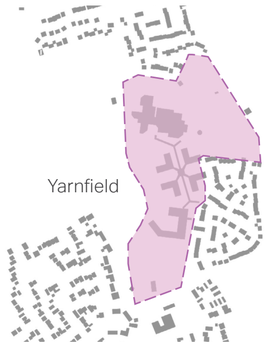


Figure 32: Location and figure ground plan of Yarnfield Park focus area in Yarnfield

Factors	Appearance characteristics
Building types	Large building blocks dominating the area, including the conference centre and accommodations blocks.
Building height	Buildings range between 2 and 3 storeys. However, 3 storeys is the prevailing building height.
Materials	Facades: Red brick Roofing: Red pantile or clay tiles
Boundaries	No hard boundaries
Setbacks	Buildings located in the centre of green spaces
Roofscape	Pitched roofs are most common in this area
Public realm	Well maintained green spaces; a large car parking for visitors to the conference centre .

Figure 33: Yarnfield conference centre entrance

Figure 34: View of accommodation buildings for Yarnfield conference centre

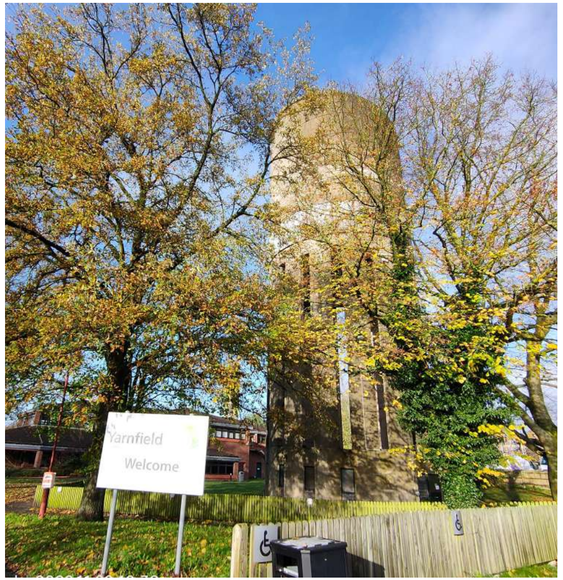


Figure 35: Old water tower at Yarnfield conference centre

3 Settlement Focus Area 3: New Communities

The New Communities are constructed in the vicinity of the Yarnfield training and conference centre between 2015 and 2018 as regeneration projects on brownfield sites.

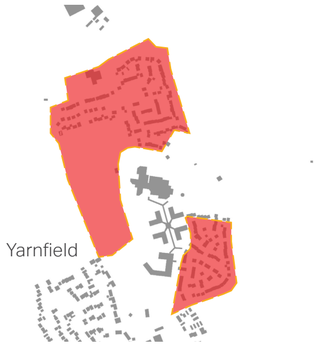


Figure 36: Location and figure ground plan of New Communities focus areas in Yarnfield

Factors	Appearance characteristics
Building types	While there are various dwelling typologies throughout the focus areas, detached dwellings are the dominant building type.
Building height	Dwellings range between 2 and 2.5 storeys. However, 2 storeys is the prevailing building height.
Materials	Façades: Red brick dominating with some buff brick; vertical tilings as features Roofing: Grey clay tiles
Boundaries	Hedgerow or lawn
Setbacks	Dwellings exhibit a variety of setbacks.
Roofscape	Gable ends dominate the areas. Side-facing gables are most common with the eaves generally in line with the residential street and the occasional front-facing gable. Several dwellings also exhibit dormers and projecting gable-ends.
Public realm	Two-sided tarmac paving for most streets. Notable public spaces including multi use play area, basketball court, and children's playground.

Figure 37: A view of 2010s built residential schemes

Figure 38: A view of village edge showing buildings overlooking the footpath and green fields

Figure 39: A View of long distance view running through this area

4 Settlement Focus Area 4: Yarnfield South

The majority of Yarnfield South focus area's homes were built in and close to the village centre after World War II and up to the late 1990's. In these communities, terraced, detached, and semi-detached residences are all mingled together.

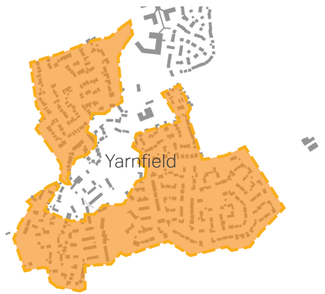


Figure 40: Location and figure ground plan of Yarnfield South focus areas in Yarnfield

Factors	Appearance characteristics
Building types	Various dwelling typologies throughout the area, but detached dwellings are the dominant building type.
Building height	2 storeys is the prevailing building height with some 2.5 storeys units as feature buildings..
Materials	Facades: Red brick; white render; grey tiling wall for some terraces Roofing: Red pantile; grey and red clay tiles
Boundaries	Red brick wall; timber fence; hedgerow
Setbacks	Dwellings exhibit a variety of setbacks.
Roofscape	Pitched roof dominate the area, with some dormers and projecting gable-ends. Special designed Roof and grey tiling wall for some linked units.
Public realm	Two-sided tarmac paving for most streets. Notable public spaces including footpaths and pocket green spaces.

Figure 41: A typical street view showing late 1980s terraced houses

Figure 43: A street view showing unusual style of terraced houses built after the Second World War

Figure 42: Poor designed footpath between hedgerows and back garden fences

Figure 44: A view of residential area built in late 20th century

Design Guidance & Codes

04

4. Design guidance & codes

A series of Design Codes have been produced to provide guidance for any future developments in Yarnfield and Cold Meece. This will ensure that local character is considered and local distinctiveness is enhanced and protected.

4.1 Introduction

Design Codes set out within this document have been significantly influenced by local precedents and also national best practice materials. Based on the understanding gained in the previous sections, feedback captured during the engagement workshop and relevant planning policy, the Design Code matrix is broken down into seven categories:

- Heritage
- Structure and Built Form
- Materials and Design
- Movement and Accessibility
- Environment and Biodiversity
- Flood Resilience
- Sustainable Design

4.2 When to Use the Codes

The table on the opposite page identifies each of the design codes in the document. A prefix has been assigned to each code to allow simple application and referencing when writing the Neighbourhood Plan.

The table shows which design codes are relevant to each of the Settlement Focus Areas (SFA) and Countryside Focus Areas (CFA).

The rational for each Design Codes is set out in the following pages followed by the Design Code and the SFA and CFA to which the code related.

Design Code			Design Code Prefix	Design Code applied to Settlement focus areas	Design Code applied to Countryside focus areas
Heritage Assets			HA	1	A, B
Village Structure and Forms	Block Structure and Building Line		BL-F	2,3,4	/
			BL-I	1,3	A, B
	Building Heights and Roofline		BH-UR	2,3	/
			BH-VR	1,2,3,4	A, B
	Terraced Building		TB	1,2,4	/
	Semi-detached Building		SDB	1,2,3,4	B
	Detached Building		DB	1,2,3,4	A, B
Materiality and Design			AM	1,2,3,4	A, B
Density and Housing Layout			DNST	1,2,3,4	A, B
Movement and accessibility	Vehicular and Non-Vehicular Route	Motorway	MW	/	B
		Main Roads	MR	1,4	B
		Tertiary Streets	TS	1,2,3,4	A, B
		Rural Lanes	RL	2,3,4	B
		Non-Vehicular Movement	NVM	1,2,3,4	A,B
Natural environment feature	Environmental Designations		ED	1,2,3,4	A,B
	Green Belt and Green Infrastructure		GBGI	1,2,3,4	A,B
	Trees, Hedgerows, Woodland		WTH	1,2,3,4	A,B
Flood Resilience			FR	1,2,3,4	A,B
Sustainable Design	Low Carbon Energy Generation		LCEG	1,2,3,4	A,B
	Energy Efficiency		EE	1,2,3,4	A,B
	Resilience to Climate Change		RCC	1,2,3,4	A,B
	Electric Vehicle Charging		EVC	1,2,3,4	/
	Net Zero Carbon		NZC	1,2,3,4	A,B

Figure 45: Yarnfield and Cold Meece Design Codes Matrix

4.3 Heritage Assets

Heritage assets play a central role in defining local character in Yarnfield and Cold Meece. Local heritage is an important tool for successful and diverse place-making and presents opportunities for future development to enhance local identity.

Listed Buildings

There are several grade II listed buildings in Yarnfield and Cold Meece, the majority of which are grade II. These designations reflect the high status, local and national significance of the assets. Future development should aim to respect and enhance the settings of listed buildings in order to retain their positive contribution to the streetscape.

Non-designated heritage assets

In addition to listed buildings there are a number of non-designated historic buildings, boundary treatments and street furniture which contribute positively to local character.

Figure 46:
Front yard of he Listed Building yew tree farm building

Figure 47:
Unlisted building: Yarnfield village hall built in 1932

Design Code: Heritage Assets (HA)

- **All new development must be respectful of the scale and massing of the historic built form.**
- **The uniformity of rooflines is of particular importance, and new development should not negatively impact visual uniformity.**
- **Poor-quality designs that do not successfully assimilate with the historic built form should be refused.**
- **Removal of green spaces and verges within the study areas should be avoided.**
- **New development should seek to incorporate elements of the local vernacular that may have previously been overlooked, such as fenestration proportions.**

SFA: 1 CFA: A, B

4.4 Village Structure and Forms

Block Structure and Building Line

Building lines play a key role in defining the layout and the character of an area. There is a mix of semi-detached and detached housing typologies in Yarnfield and Cold Meece. These lower density housing typologies contribute to the variety of building lines in Neighbourhood Area.

Any development should ensure buildings are aligned along the street with their main facade and entrance facing it, where this is in keeping with local character. Building ancillary to domestic properties such as garages may be placed gable end to the road in keeping with historic outbuildings seen throughout the area. In Yarnfield and Cold Meece there are two types of building lines that can be found throughout the area:

Design Code: Formal building lines (BL-F)

- **Formal building lines can be applied within the medium density development in the south of Yarnfield and Cold Meece or the area where the housing typology is generally uniform;**
- **The layout of developments shall be permeable in order to provide legible connections through the area and beyond.**

SFA: 2, 3, 4 CFA: -

Figure 48: Linked building lines examples within Yarnfield and Cold Meece

Design Code: Informal building lines (BL-I)

- **Informal building lines can be applied within lower density developments, such as the historic core and Yarnfield and Cold Meece Marsh;**
- **Developments with informal building lines are usually characterised by larger plots, generously-sized gardens, or with greater provision of open space;**
- **The alignment of new building lines should respond to the context of surrounding landscape;**
- **Properties should provide gardens in the front and rear; and**
- **This type of building line can be suitably applied where the development face the open countryside, or open space or the edge of development.**

SFA: 1, 3 CFA: A, B

Figure 49: Informal building lines examples within Yarnfield and Cold Meece

Building Heights and Roofline

A comfortable variation in the size and scale of buildings - from single storey bungalows to 2.5-storey properties - can enhance local character. It provides variety and difference, as opposed to homogeneity. Houses within Yarnfield and Cold Meece are mainly 1-2.5 storeys high, with a majority of 2 storey family houses. New development should be sympathetic in height and scale to its surrounding context. There are two types of building rooflines throughout Yarnfield and Cold Meece that can be identified:

Type 1 (Uniform roofline)

Buildings with uniform skyline can be found throughout residential areas within Yarnfield and Cold Meece Parish due to general street types, building heights and minimal building articulation.

Type 2 (Varied roofline)

Buildings of various heights can be found throughout the parish. The undulating topography also contributes to varied roofscapes. Such variety positively contributes to the character of Yarnfield and Cold Meece.

Design Code: Uniform Roofline (BH-UR)

- **Uniform roofline can be applied in the areas where higher density can be encouraged.**
- **Uniform roofline can be applied in areas when the development rhythmically uses several uniform housing typologies.**
- **3 or 4 buildings with the same roof height can form the uniform roofline.**
- **Roofing materials, eaves, pitch, verge details, chimney stacks, or other features visible above the ridge line should be carefully considered to create uniform roofline that reflects the surrounding context of the site.**

SFA: 2, 3 CFA: -

Design Code: Varied Roofline (BH-VR)

- **Buildings with various heights can be found in Yarnfield and Cold Meece's Historic Core and other areas that view to the open countryside. Such variety positively contributes to the character of Yarnfield and Cold Meece.**
- **This roofline can be applied in the area where the development meets the countryside's edge to retain its rural character.**
- **Roofing materials, eaves, pitch, verge details, chimney stacks, or other features visible above the ridge line should be carefully considered. These features may be diverse to create a varied roofline, while still respecting local character.**

SFA: 1, 2, 3, 4 CFA: A, B

Figure 50: Varied rooflines example within Yarnfield and Cold Meece

Figure 51: Uniform rooflines example within Yarnfield and Cold Meece

Building Typology
A variety of approaches to housing typologies and layout of buildings should be explored to make the best use of land and create high quality, comfortable and attractive homes.

New development should enhance Yarnfield and Cold Meece's character by achieving more interesting, varied and high-quality design and built form.

Depending on the housing needs, terraced, semi-detached and detached are acceptable. Design principles and precedents for each type are provided in this section.

Figure 52:
Unconventional design styles of certain terraces.

Figure 53:
Traditional styles of terraces

Design Code: Terraced Building (TB)

- **Mainly 2 Storeys for prominent or identified key buildings. Street scale needs to be considered. Wider primary routes should have larger scale buildings.**
- **Typically simple pitched roof volumes. Projecting elements should be considered on key buildings to help demarcate corners.**
- **Consistent setbacks to provide well defined street compositions.**
- **Consistent ridge and eaves lines.**
- **Respect should be shown towards the unconventional design styles of certain terraces.**

SFA: 1, 2, 4 CFA: -

Design Code: Semi-detached Building (SDB)

- **Mainly 2 Storeys, with 2.5 storey for key building locations.**
- **Typically simple traditional forms with the occasional projecting elements. Projecting elements should be considered on key buildings to help provide corner articulation.**
- **Setbacks are consistent, with only a small variation between buildings to provide a more formal street composition.**
- **Buildings should strongly relate to the street, although a varied frontage is acceptable.**

SFA: 1, 2, 3, 4 CFA: B

Figure 54:
Traditional style of detached houses

Figure 55:
Modern style of detached houses

Design Code: Detached Building (DB)

- **Variable frontages, provided through more informal building placements between plots;**
- **Building massing to be more varied with greater use of hipped roof styles and projecting gables to create varied streetscapes;**
- **Building orientation is not required to conform to any joint relationship with adjacent properties; however frontages should positively address the street; and**
- **Variation permitted to the ridge and roof lines. Individual buildings should accommodate any topographical changes between units.**

SFA: 1, 2, 3, 4 CFA: A, B

4.5 Materials and Design

Without being too prescriptive about the adopted material palette, developments should complement the existing residential character of the local area, and reflect the character of Yarnfield and Cold Meece Parish. Yarnfield and Cold Meece's existing local character and material palette is generally predominated by brick, with slate and tile roofs. These materials should be used as a design cue for any new development. Development should adopt high quality, natural materials which sit well within the attractive natural landscape and which help to reinforce notions of the town where possible.

Design Code: Architecture and Materials (AM)

- **It is very important that proposed developments are well evaluated to achieve a high quality of design, sympathetic to the existing built fabric in the surrounding Focus Areas and reinforcing local distinctiveness;**
- **Material selections should be made based on an understanding of the immediate context and the wider Yarnfield and Cold Meece Parish built environment. Where proposals affect heritage assets, either directly or due to proximity, it is recommended that advice is obtained from a Conservation Architect at an early stage of design development;**
- **Any development which adopts traditional vernacular features found in Yarnfield and Cold Meece must have an integrity of heritage detail;**
- **The materials listed in this document should not be considered prescriptive; and**
- **Designs need to be sensitive and complementary to their surroundings, but this does not require merely replicating existing styles and imitating architectural details. It is recommended that contemporary architectural solutions are considered.**

SFA: 1, 2, 3, 4 CFA: A, B

SFA: 1, 2, 3, 4 CFA: A, B

Figure 56: Examples of materials used in Yarnfield and Cold Meece

4.6 Density and Housing Layout

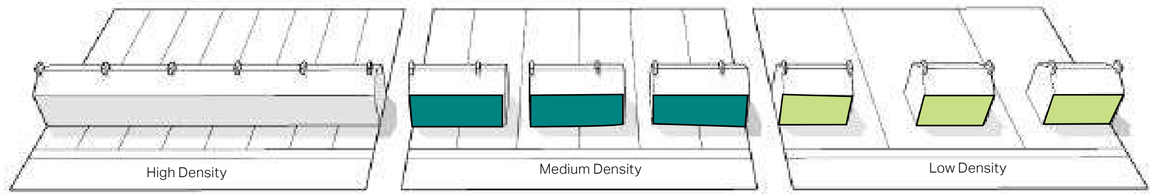
This aspect is key to the neighbourhood plan area's sense of place. Consider how the density and housing layout, orientation of streets, blocks, terraces, buildings facades and roofscapes help to read or reinforce the sense of traditional building patterns and density in the local area.

New development should draw upon high quality precedents for inspiration as to what can be delivered in terms of materiality, layout and design. Proposed density should reflect the varied context across Yarnfield, and appropriately respond to the existing topography and landscaping. It is intended that density is mixed across the allocated sites, with each of the development parcels delivering a different density of units. This mixture will help to create variety which is responsive to the local area needs and surroundings.

Design Code: Density (DNST)

- **Appropriate housing density should be considered by site basis, with decisions informed by local context of the area. This might include design considerations, historic or environmental integration, local character or identified local need.**
- **The density of development should be sympathetic to the area to which it will extend;**
- **Low density units should be located to the edges of the settlement while higher density development should occur in the core and along primary routes.**
- **New developments should recognise landscapes that have been deteriorated over decades. Recovery of lost landscaping and the improvement of existing green infrastructure should be a priority for every new development to meet the demands of providing net gains for biodiversity as per the NPPF.**

Figure 57: Achieving density diversity across the village



Below are the different density types which could be adopted by developments:

- **Higher Density includes terraced units, town houses and apartments (both new build and reconfigured existing buildings). Dwellings should be orientated to create overlooked streets, with a strong, active frontage and incorporate a formal arrangement of buildings with strong linearity which is softened by surrounding landscaping.**

- **Medium Density includes semi-detached units are encouraged. Houses should be positioned and orientated to overlook the streets and town boundaries, whilst frontages along the internal primary roads should be active. A mixture of a formal and informally arranged dwellings will be required.**

- **Lower Density includes detached units or bungalows, which is reduced in scale and proximity of adjacent units.**

SFA: 1, 2, 3, 4 CFA: A, B

4.7 Movement and Accessibility

A well-designed street hierarchy and streetscape are key elements of successful places. The relationship between streets and the adjacent buildings strongly influences the safety, appearance and movement function of development. New development should accommodate traffic flow and allow for access by service vehicles, but it should also contribute positively to the character of Yarnfield and Cold Meece.

New developments should be designed to positively contribute to the movement around the parish, making it more efficient and legible. In order to do this, a clear street hierarchy should be established in new developments. Streets in the hierarchy must be distinctive from one another in order to heighten legibility. (figure 08, page 15)

Furthermore, this design code aims to guide any future development to contribute to sustainable connectivity, particularly walking and cycling as a means of local movement measures.

Design Code - Motorway (MW)

- **The primary motorway in the Yarnfield and Cold Meece Rural Parish is the M6, facilitating vital connections to nearby areas. However, villages within the parish are only accessible via junctions situated outside of it. The zones adjacent to the M6 have a linear layout, but they may not be appropriate for development due to high levels of noise, visual disturbances, air pollution, and difficulties with access.**

SFA: - CFA: B

Design Code - Main Roads (MR)

- **The main roads circulate traffic around Yarnfield and Cold Meece, providing access to different neighbourhoods and so linking them with the surroundings.**
- **The main roads accommodate medium density development. These routes are important in the movement hierarchy and should have wide street spines and pavements on both sides.**
- **Carriageways should be designed to safely accommodate both vehicles and cyclists. Reallocation of space to support this is encouraged where possible.**

SFA: 1, 4 CFA: B

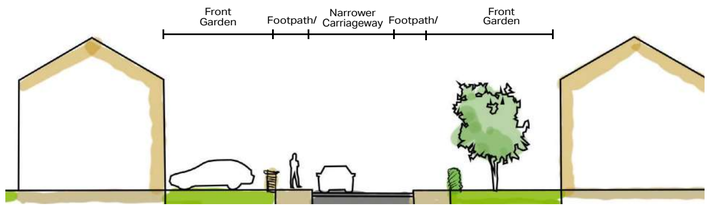


Figure 58: Typical Precedent Main Road Section crossing the village

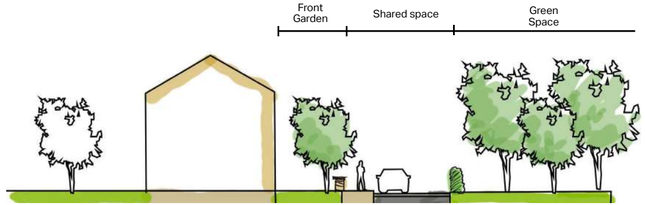


Figure 59: Typical Precedent Tertiary Street Section

Design Code - Tertiary Streets (TS)

- **Streets are of an intimate scale and work well as informal, shared spaces. There is therefore opportunity to adopt pedestrian and cyclist priority along these street types.**
- **There should be a comfortable transition between the different route typologies.**

SFA: 1, 2, 3, 4 CFA: A, B

Design Code - Rural Lanes (RL)

- **Rural Lanes are commonplace throughout the Neighbourhood area. These lanes have an informal character and provide access to more isolated development such as farms.**
- **They are narrow, supported with little highway infrastructure, and of varying quality. These lanes play an essential role in offering countryside connections.**

SFA: 2, 3, 4 CFA: A, B

Figure 60: Typical street view of a Tertiary Street

Design Code - Non-vehicular Movement (NVM)

- **The quality and safety of walking and cycling environments of villages should be improved.**
- **Improvements to junctions to enhance public space and improvements to pedestrian movement and safety should be achieved, particularly within the village central areas.**
- **Any proposed routes should provide a permeable and connected pattern, creating different travel options, particularly for pedestrians. Integration between transport modes should be improved.**
- **Better Information systems, such as finger posts, should be provided at appropriate locations to support using of footpaths and cycle routes.**

SFA: 1, 2, 3, 4 CFA: A, B

4.8 Natural Environment Features

The Neighbourhood area is host to an array of both statutory and non-statutory environmental designations. This comprises the network of green spaces, water bodies, biodiversity habitats and other natural elements. All of these spaces need to be well maintained to ensure they continue to meet the needs of the local people, as well as the animal and plant species within its ecosystem.

The Neighbourhood area's open countryside is a defining feature of its landscape character, making it all the more important to preserve such areas where possible. A majority of these spaces fall within the Green Belt, adding an extra layer of protection to these locally and naturally important spaces.

Figure 61:
Examples of good quality green spaces in communities

Design Code - Environmental Designations (ED)

- **Any development should enhance biodiversity and landscape characteristics wherever possible. This will involve restoring and increasing the total area of natural habitats and landscape features, and provision of a clear landscaping scheme to demonstrate how new development will create positive green linkages and contribute to these assets.**
- **New developments should strengthen biodiversity and the natural environment. Biodiversity Net Gain (BNG) should be adopted as a requirement for all relevant development.**
- **New development proposals should aim for the creation of new habitats and wildlife corridors, e.g. by aligning back and front gardens, and new areas of woodland, stone walls/hedgerows, grassland or wetland habitats. Gardens and boundary treatments should be designed to allow the movement of wildlife and provide habitat for local species. Signs and safe crossing points for wildlife such as amphibians, ducks and hedgehogs should be considered as part of proposals.**

SFA: 1, 2, 3, 4 CFA: A, B

Figure 62:
Examples of Green Belt around the village

4.8.1 Green Belt and Green Infrastructure

The Neighbourhood area has a strong well connected Green Infrastructure network, including many allocated open spaces, playing fields, and Green Belt. These various types of green infrastructure often play an essential role in the character of that particular settlement and in separating villages regarding setting and local amenity. With these Green Belts, development is resisted to conserve the character and boundaries of each settlement.

Any development should consider these open spaces as an integral aspect of the developments layout. Where possible, any existing open spaces should be retained and enhanced, and with new developments ensuring they contribute to the enhancement of the Neighbourhood area's open spaces. Any new development needs to provide a contextually appropriate and high-quality volume of open space.

Design Code - Green Belt and Green Infrastructure (GBGI)

- **Green Belt and Green Infrastructure should be protected and enhanced.**
- **Developments adjoining public open spaces should arrange main building façades and entrances to face the open space. This will enhance the character of the space, which will help create a sense of place, improve natural surveillance, and foster social interaction.**
- **Open spaces should offer a variety of uses related to the surrounding activities and buildings. Where play areas are required, these should not be isolated, and should be located within short walking distances of housing and should promote natural surveillance with buildings overlooking them.**
- **The Design Codes will support those strategic green gaps to be allocated and defined as protected green spaces.**
- **Proposals for new open space or improved open space, especially in areas with a deficiency of provision, will be encouraged.**

SFA: 1, 2, 3, 4 CFA: A, B

4.8.2 Woodland, Trees and Hedgerows

Woodland, trees and hedgerows have a significant contribution to both the built and rural environment of the Neighbourhood area. Their visual amenity helps define the rural and natural character of the wider Neighbourhood area. According to the Hedgerow Regulation 1997, any good quality hedgerows classified as important should be protected and enhanced where necessary. This is known as 'Important Hedgerow. Development should therefore seek to enhance and protect groups of high quality trees, hedgerow and woodland.

Development should also aim to preserve and enhance trees and tree groups where appropriate. Selected existing trees along the parcel edges are to be retained to create a maturity of the place and define boundaries. Planting of trees is encouraged to help strengthen borders and to help maintain the strong edges of any development.

This Design Code acknowledges that many residents value the woodlands around the Neighbourhood area as well as its Local Wildlife Sites and other open areas. The Design Code stresses the importance of green areas and aims to support the ways and means by which local residents can connect more with the natural environment, even within the cores of each of the settlements.

Figure 63:
Woodlands within the village

Design Code - Woodland, Trees and Hedgerows (WTH)

- **Developments should be designed to retain trees, particularly those of landscape and biodiversity importance, with a view to increasing tree cover.**
- **The spacing of development should reflect the rural character and allow for long distance views of the countryside from the public realm.**
- **Appropriate levels and quality of both trees and soft landscaping should be incorporated in the design.**
- **In the peripheral areas of the Neighbourhood area's villages, the rural character of the area should be preserved and enhanced through the retention of grass verges, hedgerows and trees, as well as new plantings to improve biodiversity.**
- **Species choice should be predominantly native but not completely; a 2:1 ratio would be appropriate to help build a tree population that supports UK wildlife but is also capable of responding to new disease and climate threats.**
- **Whilst it is not expected that all trees be retained on development sites (as trees can grow with defects that make their retention undesirable), any new development should put great thought into tree retention and planting as part of proposals.**
- **Careful consideration should also be taken when planting new trees so as not to block any light or CCTV columns or obstruct line of sight, which are essential for natural surveillance.**
- **The loss of better quality / higher valuable trees within the site which would fail to enhance the green infrastructure and biodiversity should be minimised.**
- **Tree planting should be considered everywhere across the Neighbourhood area to connect residents with the natural environment.**
- **New domestic and commercial lighting should be designed to preserve dark skies.**
- **Species such as newts, water voles, badgers, bats, nesting birds and their habitats are protected and must be considered by any development.**

SFA: 1, 2, 3, 4 CFA: A, B

4.9 Flood Resilience

Yarnfield and Cold Meece has a small number of residential properties within Flood Zone 3 which have a high risk of flooding. The community is therefore very aware of the impact development can have on flood risk to both the wider area and their own properties.

New development should seek to avoid Flood Zone 3 where possible, in particular avoiding areas of functional floodplain. The Sequential and Exception Tests should be utilised to locate the development as required by NPPF. Proposals should not increase flood risk to either the development site or elsewhere. Consideration should be given, in developing designs, to manage surface water run-off in such a way that slows run-off down and serves to contribute to reducing flood risk to properties downstream as well as at the development site.

Due to the settlement areas' susceptibility to flooding, it would be preferable for developments to limit surface water discharge rates below the Greenfield run-off rates. This may not be practical in all situations, and the Greenfield rate should be considered a maximum.

Where possible, developments should look to implement Sustainable Urban Drainage Systems (SuDS) to manage drainage requirements. These would preferentially use natural processes to provide green areas, allowing residents to connect more with nature.

Design Code - Flood Resilience (FR)

- **SuDS should be integrated into developments to help address surface water run-off. These should be designed in accordance with The SuDS Manual, CIRIA.**
- **Drainage should be considered early in the development planning and design process, along with other key considerations.**
- **Existing watercourses, existing surface water flow routes across the site, and existing drainage systems, must be taken into consideration and the drainage strategy should mimic natural drainage patterns as closely as possible.**
- **Adoption of permeable paving solutions instead of tarmac is encouraged. Gardens and soft landscaping should be maximised to reduce the overall area of impermeable hard surfacing that might increase surface water volumes and increase local flood risk. Further, green space can be used for natural flood protection e.g. permeable landscaping, swales etc.**
- **Boundary treatments within the flood zone are encouraged to be designed with high water resistance materials and/or effective seals to minimise water penetration, provided these treatments are in keeping with the local character.**
- **Proposals should take a proactive approach to incorporating flood resilience into building design through internal layout. Where appropriate the Flood Resilient Construction of New Buildings Guidance (Ministry of Housing, Communities & Local Government, 2007) should be adopted.**
- **New housing should demonstrate how rainwater and grey water will be stored and reused to reduce demand on mains supplies. Rainwater harvesting helps to capture and store rainwater for irrigation and cleaning. Efforts should be made to conceal the units, or install them with attractive materials, cladding and finishings. Greywater recycling reduces pressure on local utilities by enabling the occupier to re-use water from showers and washing machines in WCs.**
- **The installation of water butts within new residential developments is encouraged to collect rainwater from roofs and reduce the overall rainwater runoff impact of any development.**
- **Buildings should incorporate domestic water saving measures such as aerated taps, thermostatic mixer valves, low-flow showers, dual flush WCs and water-efficient white goods.**
- **Wastewater heat recovery solutions could be considered in the domestic units as well as any commercial buildings which are likely to have a high hot water demand, e.g. hotels, leisure centres, school changing areas etc.**

SFA: 1, 2, 3, 4 CFA: A, B

4.10 Sustainable Design

The Local Plan encourages creating buildings and spaces with reduced environmental impact, offering people opportunities to live lower carbon lifestyles. Buildings should be suitable for future adaptation, conversion or expansion. The sustainable design and construction of new buildings and extensions to existing buildings have an essential role in reducing running costs, improving energy efficiency, and reducing greenhouse gas emissions.

Integration of sustainability should be considered from the concept stage, considering passive solar heating, cooling and energy-efficient strategies. The energy hierarchy should be adopted through the implementation of passive environmental design principles (considering how the site layout can optimise beneficial solar gain and reduce energy demands, e.g. insulation while reducing the risk of overheating), then specification of energy-efficient building services before the incorporation of renewable energy sources.

Figure 64: Precedent image - example of integrated solar panelling

Design Code - Low Carbon Energy Generation (LCEG)

The National Grid is de-carbonising as cleaner, greener energy is used to generate electricity, supporting a move away from fossil-fuel heating to electricity-based systems. Additional sources of low carbon energy should be included in the design where suitable.

- **Where possible, buildings with complementary energy profiles should be clustered together such that a communal low carbon energy source (e.g. an ambient loop network) can be used to supply multiple buildings that might require energy at different times of day or night. This can be used to reduce peak loads. Further, waste heat generated from one building could then be used to heat another.**
- **Depending on local water bodies in close proximity to the development, water source heat pumps may be a suitable source of heating and cooling. In a large development these may contribute to a District Heating Network (DHN) or for a large commercial building they may be used directly. They can be designed to use either static or flowing bodies of water but require detailed environmental assessments to be carried out as part of the design process.**
- **Biomass boilers might be suitable in buildings with a predictable heat load, as the heat output cannot be easily modulated to match load changes instantly. Biomass should only be specified on sites where there is a local sustainable source of wood chips or pellets that can be readily stored nearby and there is space for storage and easy transport access for deliveries.**

SFA: 1, 2, 3, 4 CFA: A, B

Design Code - Energy Efficiency (EE)

- **Active measures may include the specification of energy efficient building services and controls to facilitate efficient operation.**
- **All heated pipes and ducts should be insulated, and service penetrations sealed, to improve system efficiency, prevent heat loss and minimise the risk of overheating.**
- **Lighting in the commercial buildings should be on zone control with presence and daylight detection where suitable. LED light fittings should be specified, both internally and externally, with automatic switch off at night where not required for safety or security.**

SFA: 1, 2, 3, 4 CFA: A, B

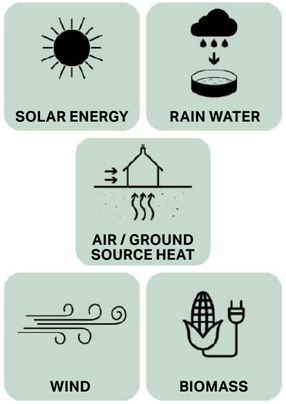


Figure 65: Key alternative natural energy sources

Design Code - Resilience to Climate Change (RCC)

All new development should work to moderate extremes of temperature, wind, humidity, local flooding and pollution within the Neighbourhood area:

- **Areas of the Neighbourhood area are at risk of flooding from watercourses and surface water. Avoid siting homes in high risk flood areas and mitigate increased risk of storms/flooding with sustainable drainage systems. These reduce the amount and rate at which surface water reaches sewers/ watercourses. Plant trees as part of major development for habitat, fuel and sustainable building materials.**
- **Eco-systems cannot adapt as fast as the climate is changing leading to loss of biodiversity. Protecting and enhancing the Neighbourhood area's watercourses and green infrastructure can combat this. Aim to increase ecology through biodiversity net-gain (BNG) on major development sites.**
- **Use street trees and planting to moderate and improve micro-climate for streets and spaces.**

SFA: 1, 2, 3, 4 CFA: A, B

Design Code - Electric Vehicle Charging (EVC)

Current transition to electric vehicle technology and ownership comes with related issues that must be addressed by new development. Two key areas are explored below - public parking areas and private parking for homes.

Design issues to address for public parking:

- **Provision of adequate new charging points and spaces and retrofitting existing parking areas.**
- **Serving remote or isolated car parks (e.g. in woodland areas).**
- **Retrofitting existing public parking and upkeeping design quality of streets and spaces (attractiveness and ease of servicing/maintenance).**
- **Integrating charging infrastructure sensitively within streets and spaces, for example, by aligning with green infrastructure and street furniture.**
- **Sensitive integration of charging infrastructure within conservation areas.**

SFA: 1, 2, 3, 4 CFA: A, B

Figure 66: Public electric vehicles charging points

Figure 67: Home electric vehicles charging point

Design issues to address for parking at the home:

- **Convenient on plot parking and charging points close to homes.**
- **Potential to incorporate charging points under cover within car ports and garages.**
- **Still need to integrate car parking sensitively within the streetscene. For example, parking set behind the building line or front of plot spaces lined with native hedgerow planting.**
- **Need to consider visitor parking / charging needs.**
- **Existing unallocated / on-street parking areas and feasibility to provide electric charging infrastructure not linked to the home.**
- **Potential for providing secure, serviced communal parking areas for higher density homes.**

SFA: 1, 2, 3, 4 CFA: A, B

Design Code - Net Zero Carbon (NZC)

Key considerations in the assessment of alternative energy sources for development may include (but are not limited to):

- **Optimise solar orientation of streets and buildings. Aim to increase the numbers of buildings on site that are oriented within 30' of south (both main fenestration and roof plane) for solar gain, solar energy (solar panels) and natural daylighting.**
- **Ground conditions to accommodate loops for ground source heat and space for air source heat pump units.**
- **Links to local estates for sustainable coppicing, harvesting or recycling of biomass fuels.**
- **Local wind speed and direction for micro-generation wind turbines.**

SFA: 1, 2, 3, 4 CFA: A, B

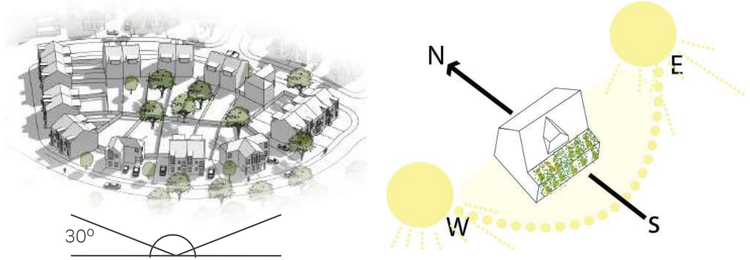


Figure 68: Dwellings oriented within 30° of south for solar gain

Figure 69: Carefully angled solar panels that harness every moment of the sun

By default, new development should adopt a fabric first approach in line with the governments emerging Future Homes Standard, to attain higher standards of insulation and energy conservation.

- **Reducing energy demand further by employing passive design principles for homes is desirable and can make some forms of development more acceptable to the community (window orientation, solar gain, solar shading, increased insulation, ventilation with heat-recovery).**
- **Maximise on-site renewable energy generation (solar, ground source, air source and wind driven).**
- **Consider building form and thermal efficiency: point-block/ terraced / semi-detached / detached all have different energy efficiency profiles. This must be balanced with local design preference and character considerations to ease acceptance for development.**

SFA: 1, 2, 3, 4 CFA: A, B

Figure 72: Air source heat pump unit located to the rear / side elevation of a dwelling, so to avoid its visual impact on the dwellings frontage and wider streetscape

Figure 70:
Precedent image - example of energy efficiency design

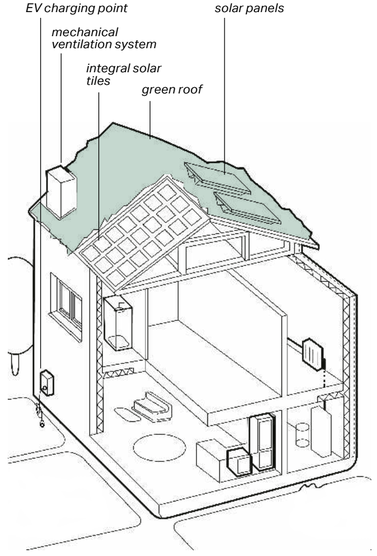


Figure 71: Cut-through diagram of an energy efficient home and its features

Next Steps

05

5. Next Steps

This document provides a series of design principles, Design Codes and recommendations for the Yarnfield and Cold Meece Parish Neighbourhood Plan Area. The document is based on high-level reviews regarding the context, constraints, history, and characteristics of the village and surrounding countryside areas. The reviews suggest that any future development should be in line with the local characteristics and the existing context. The Design Code provided within the document will guide future developments across the whole Neighbourhood area to respect, conserve and improve the existing character, heritage, links, and villagescape features.

Yarnfield and Cold Meece Rural Parish Council is recommended to use this document to embed design policies within the Neighbourhood Plan to achieve the objectives set out in this document. Developers should also observe this document to understand the design quality they are expected to accomplish within the Neighbourhood Planning Area.

Credits to the Yarnfield and Cold Meece Neighbourhood Plan Steering Group for their efforts in assisting with the content of this report.

About AECOM

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle — from planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivaled technical expertise and innovation, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a *Fortune 500* firm and its Professional Services business had revenue of $13.2 billion in fiscal year 2020. See how we are delivering sustainable legacies for generations to come at aecom.com and @AECOM.