North York Moors National Park
Planning Services - Development Management
The Old Vicarage
Bondgate
Helmsley
York
North Yorkshire
YO62 5BP

## PLANNING PORTAL SUBMISSION REF: PP-I 0032806

$15^{\text {th }}$ July 2021

Dear Sir / Madam

RE: FULL PLANNING APPLICATION FOR A NEW ACCESS OFF STAINSACRE LANE AND ASSOCIATED LANDSCAPING FOR ZONE 2 OF THE RESIDENTIAL DEVELOPMENT AT BROOMFIELD FARM, WHITBY

Spawforths are instructed on behalf of Keyland Development Ltd to submit a full application on land off Stainsacre Lane, for the following development

## "FULL PLANNING APPLICATION FOR A NEW ACCESS OFF STAINSACRE LANE AND ASSOCIATED

 LANDSCAPING FOR ZONE 2 OF THE RESIDENTIAL DEVELOPMENT AT BROOMFIELD FARM, WHITBY"The submission package for this application comprises the following:

| Document name | Ref no. / Dwg no. / Rev | Size / Scale |
| :--- | :--- | :--- |
| Covering Letter | P0-TP-SPA-LT-P4I76-00II3-A | A4 |
| Design and Access Statement | P0-TP-SPA-RP-P4I76-0006-A | A4 |
| Zone 2 Access Red Line Plan | P4I67 00-0I9 Rev E | I:I000 @ AI |
| Broomfield Farm Whitby: Second <br> Access (landscaping plan) | R/2320/6 | I:500 @ AI |
| Flood Risk Assessment | $0046362-B H E-X X-X X-R P-C W-00010$ Rev P0I | A4 |

[^0]| Document name | Ref no. I Dwg no. I Rev | Size / Scale |
| :--- | :--- | :--- |
| Phase I Preliminary Risk | 079348-CUR-00-XX-RP-GE-000I V0I | A4 |
| Assessment | $21105-00$ I | A4 |
| Transport Statement | ER-556I-0I | A4 |
| Preliminary Ecological Appraisal Report <br> (NB includes sensitive information on <br> badgers not suitable for public domain) | ER-556I-02 | A4 |
| Hedgerow Regulations Assessment |  |  |

## Background

Keyland Development Ltd has secured planning permission for up to 290 dwellings at Broomfield Farm, Whitby. The site forms part of the land allocated for housing under Site Reference HAI8 within the Scarborough Local Plan.

The hybrid planning application submitted to Scarborough Council sought outline planning permission for up to 290 dwellings with all matters reserved for future approval apart from access and full permission for vehicle access, the main spine road through the site, drainage infrastructure and public open space. The planning application reference number is 20/00249/FL.

The hybrid planning application was heard at planning committee on 12 November 2020 and secured an approval subject to the satisfactory completion of the Section 106 Agreement and was approved on the $25^{\text {th }}$ March 202I. Below is a copy of the indicative masterplan associated with the planning application:


The Application Site is split in to two distinct parts, which are defined as Zone I and Zone 2. The Zones are separated by the existing access road that serves the Whitby Waste Water Treatment Works. Zone 2 directly borders on to the National Park. Below is a plan showing the location of the two development zones:


It is envisaged that Zone I will come forward for a mixture of market and affordable housing delivered by one or more volume house-builders. The housing within Zone I will fund the delivery of the large amount of infrastructure required to unlock the application site and the remainder of the allocation. These infrastructure works include a new priority roundabout and additional pedestrian and cycle facilities on Stainsacre Lane, as well as the provision of the spine road and significant amounts of open space and drainage works within the proposed development.

Zone 2 forms one of the nine projects that constitute the $£ 25$ million Whitby Town Deal bid, which has been submitted to government for approval. The project, known as "Broomfield Farm Carbon Neutral Village" is proposed to be delivered with the help of funding through the Town Deal. Should the funding be granted, the project is proposed to deliver homes with a range of sustainability features in the first zero carbon, community self and/or custom-build housing scheme in Yorkshire. Keyland carried out research, which identified a significant level of demand for self and custom build plots within Whitby and the wider geographical area including the National Park.

Keyland are also exploring how the scheme can provide training to local people during the construction phase in carbon neutral and alternative construction methods. A number of opportunities are being explored with local colleges and education providers within the local area, including those whose catchment areas fall within the National Park.

## The Proposal

The applicant is seeking approval for the creation of a vehicle access into Zone 2, which is currently being considered for a Carbon Neutral Village, through part of the adjoining field, which lies within the National Park. The access would serve exclusively Zone 2 with the intention that there would be no vehicle access from Zone I. The access would be designed to only facilitate the delivery of the scheme thus minimising its impact on the National Park. The proposal is accompanied by a suite of environmental and landscape improvements, which would mitigate the visual impact of the proposed access and provide a significant benefit to the landscape setting of the National Park as well as enhance its public enjoyment.

The principle purpose of the new access is to ensure that Zone 2 can start to be delivered in 2022, which is necessary in order to secure the funding from the Towns Fund Deal. The funding secured through the Towns Fund Deal has to be spent by this date.

The alternative approach would be that Zone 2 is accessed from a spur road from Zone I. However in order to gain access through to the village, it would necessitate the delivery of a significant proportion of
the internal spine road and a highway spur within Zone I, which is wholly dependent on the developer of Zone I securing Reserved Matters in a timely manner and completing the necessary dwellings to deliver the required highway infrastructure. The timings of the works required to allow vehicle access through Zone I are outside the control of the Applicant and present a significant risk to the development programme for the potential Carbon Neutral Village, which in turn jeopardises the ability to meet the deadlines necessary to drawn down the funding from the Towns Fund Deal. If the applicant is unable to draw down the funding from the Towns Fund Deal, it would significantly put at risk their ability to create an exemplar Carbon Neutral development because of the underlying viability concerns in this untested market.

The creation of a dedicated access for Zone 2 would also have a number of other benefits including creating an attractive gateway to the Carbon Neutral Village and enhancing its own distinct sense of place separate from the more traditional volume house-builder development in Zone I.

## Statutory Planning Policy Context

The statutory Development Plan for the consideration of this application comprises the North York Moors National Park Authority Local Plan (July 2020) and Whitby Business Park Area Action Plan (2014).

Section 38 of the Planning and Compulsory Purchase Act 2004, states that applications should be determined in accordance with the development plan unless material considerations indicate otherwise. This section identifies the planning policies and other material considerations that are relevant to this proposal.

## Local Policy

The North York Moors National Park Authority Local Plan was adopted in 2020. The most relevant policies to the principle of development are:

- Strategic Policy A - Achieving National Park Purposes and Sustainable Development
- Strategic Policy B - The Spatial Strategy
- Policy COI - Developer Contributions and Infrastructure
- Policy CO2 - Highways
- Policy CO4 - Public Rights of Way and Linear Routes


## Analysis

Strategic Policy A states that within the North York Moors National Park a positive approach to new development will be taken, in line with the presumption in favour of sustainable development set out in the National Planning Policy Framework (NPPF) and where decisions are consistent with National Park's statutory purposes which are:
I. To conserve and enhance the natural beauty, wildlife and cultural heritage of the National Park;
2. To promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public.

The Proposed Development would involve the creation of a modest access through a small section of the field adjoining the Broomfield Farm development. The access would be designed to the minimum specification necessary to deliver the 60 dwellings proposed within the potential Carbon Neutral Village (Zone 2). The access would be unobtrusive and surrounded by native hedgerows and trees in order to screen and blend it in with the surrounding landscape. The access would have the appearance of a country lane similar to those located throughout the National Park.

The proposal would be supported by a suite of wider environmental, ecological and community benefits. It is proposed that a comprehensive landscaping programme will be undertaken within the adjoining field, which will include creating a local nature area through the planting of native trees, shrubs and wildflowers. The nature conservation area would provide a soft landscaped gateway to the National Park in comparison to the hard edge from the proposed development and would assist in detracting attention from neighbouring Whitby Business Park.

It is important to note that the adjoining field within the National Park is not required to deliver a positive Net Biodiversity Gain (NBG) for the Broomfield Farm development. Therefore, the benefit to biodiversity and local wildlife would be in addition to the IO\% NBG gained within the development.

Therefore, it is considered that the proposal would enhance the natural beauty and wildlife interest of the National Park and promote opportunities for the understanding and enjoyment of its special qualities. As a result, the proposal would fully accord with Strategic Policy A within the Local Plan.

Strategic Policy B sets out the settlement hierarchy for the National Park. The proposal sets out the different types of development that will be permitted in the Open Countryside, which includes, amongst
other things, development that is essential to meet social or community needs and it can be demonstrated that there are no other suitable and available locations within Helmsley and the Villages.

We consider that there is a clear social and community need for the delivery of the access from the National Park in to the potential Carbon Neutral Village. The access will assist in the securing the funding from the Towns Fund Deal and thereby enabling the delivery of the exemplar development. The development will potentially provide 60 no. Zero Carbon homes with a range of sustainability features in the first zero carbon, self and/or custom build housing scheme in Yorkshire. Thus, it will assist in meeting the housing needs of the residents of Whitby and the National Park.

The Carbon Neutral Village will provide a replicable approach to sustainable, community focussed, multigenerational housing for Scarborough and the National Park.

There is a clear need for the access to be located in this location within the National Park, which could not be met within any settlement or alternative location. Therefore, it is considered that the proposal accords with Strategic Policy B.

Policy CO2 states that new roads are not considered appropriate in the National Park and will not be permitted unless it can be robustly demonstrated that they will meet a compelling need, which cannot be met in any other way and are acceptable in terms of landscape and other impacts.

Firstly, the access is designed to the minimum specification required to deliver the Proposed Development and maintain its viability. Thereby ensuring that it would have minimal impact on the National Park. Therefore, it is considered that the proposal does conflict with the purpose of the policy, which is clearly to prevent significant road building within the National Park. Nevertheless, it is clear that there is a compelling need for the access, which cannot be met in any other way. It is also clear that the proposal would be acceptable in landscape terms and would not harm any other notable interests.

In conclusion, it is considered that the proposed access in to the Carbon Neutral Village from the National Park would comply with the policies within the North Yorkshire Moors Local Plan (2020). The proposal is for a type of development allowed within the open countryside by virtue of there being a compelling need for the access, which cannot be met elsewhere within the National Park (or within the Scarborough Borough area?). The accompanying suite of environmental benefits would also serve to enhance the natural beauty and wildlife interest of the National Park and promote opportunities for the understanding
and enjoyment of its special qualities. Therefore, the proposal is consistent with the statutory purposes of the National Park.

## Environmental Impact Assessment

The proposals do not fall within Schedule I of The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (EIA Regulations) where an ES is mandatory. However, the proposals do fall within Schedule 2 of the EIA Regulations as a development that "is to be carried out in a sensitive area" as defined within Part I(2) of the EIA Regulations, in this instance a National Park. An EIA is not however needed for every Schedule 2 project. The EIA Regulations and Planning Practice Guidance (PPG) are clear that an EIA is required for Schedule 2 projects only if they are likely to give rise to significant effects on the environment' by virtue of factors such as their nature, size or location`.

As such, Spawforths have assessed the proposals against the 'selection criteria' in Schedule 3 of the EIA Regulations for screening Schedule 2 development to assess whether this particular development is likely to have significant effects on the environment. Given the minimal scale of the Proposed Development and its proposed location alongside an A road and as part of a wider approved development, and as such will not give rise to any significant effects on the environment. It is it therefore our considered opinion that an EIA is not required.

On the basis of the above information we would ask that the Local Planning Authority, should it accept our analysis, issue a Screening Opinion to the effect that it does not require a full EIA to be carried out prior to determining the forthcoming planning application.

We trust that the submitted information is sufficient for the application to be validated and therefore we anticipate that you will confirm this in due course and that a written confirmation of the target date for a decision will be issued shortly.

Should you require any further information or clarification then please do not hesitate to contact us on the attached details.

Yours faithfully,

Cc: Beth McQue - Keyland Developments Ltd
File Ref: P0-TP-SPA-LT-P4I76-0013-B.docx

## Design and Access Statement

This Design and Access Statement accompanies a full planning application for a new access road off Stainsacre Lane to support the delivery of the neighbouring Broomfield Farm residential development. The site at Broomfield Farm benefits from hybrid consent for up to 290 dwellings, and is allocated for housing within the Scarborough Local Plan. The proposed access road subject of this application will create a vehicle access into Zone 2, currently being considered for a Carbon Neutral Village.

## Amount and Scale

The site comprises an agricultural field approximately 2.4 ha in area, all of which lies within the North York Moors National Park. It is proposed to provide a comprehensive landscaping sch eme on the vast majority of the site, with only a small portion to be developed as a new access road. The surface area of the proposed access road is approximately 595 sqm , which represents approximately $2.5 \%$ of the overall site area.

## Layout

The proposed access road will run from Stainsacre Lane which bounds the Site to the north east, and will curve approximately 45 degrees east-west across the northern corner of the Site to join Zone 2 of the approved residential development site at Broomfield Farm. Access will be taken from a ghost island rightturn priority T-junction with Stainsacre Lane. The proposed access road will serve Zone 2 only, with no through vehicle access anticipated from Zone I further to the west.

## Appearance and Landscaping

The appearance of the proposed access road will be the same as that of a standard road, in accordance with the standards set out in the Design Manual for Roads and Bridges. The road will have a 5.5 m carriageway, with 2 metre footways.

As described above, the proposed road forms a minimal part of the overall site area, with a comprehensive landscaping scheme proposed across the majority of the site. This landscaping scheme seeks to prove a local nature area through the retention of existing hedgerows, supplemented with the addition of new native hedge to the north-eastern boundary, and a mix of native tree and shrub planting across the site. A series of "ornamental" trees will line the road, softening the visual impact of the road and creating a green avenue entrance to the residential area. The site will be covered with a proposed wildflower grass mix.

Along with the visual softening of the proposed road, this nature conservation area would provide a soft landscaped gateway to the National Park in comparison to the hard edge from the neighbouring development and would assist in detracting attention from neighbouring Whitby Business Park.

## Conclusion

The proposed access road and associated landscaping has been sensitively designed in response to its setting, at the gateway to the National Park.

## BURO HAPPOLD

# Broomfield Farm, Whitby, Zone 2 Access Road 

Flood Risk Assessment<br>0046362-BHE-XX-XX-RP-CW-00010<br>0046362<br>15 July 2021<br>Revision P01

| Revision | Description | Issued by | Date | Checked |
| :--- | :--- | :--- | :--- | :--- |
| P01 | Issue for Planning | SM | 15.07 .21 | NV |

https://burohappold.sharepoint.com/sites/046362/05_Discipline Specific/34_Water Engineering/Broomfield FRA SM/0046362-BHE-XX-XX-RP-CW-00010_Broomfield Zone 2 Access Road_FRA.docx

This report has been prepared for the sole benefit, use and information of Client name for the purposes set out in the report or instructions commissioning it. The liability of Buro Happold Limited in respect of the information contained in the report will not extend to any third party.
$\qquad$
signature
date $\quad$ 15 $^{\text {th }}$ July 2021

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Figure 2-5: Location Plan (P4176-SPA-XX-ZZ-MP-00-022 received from Spawforths 08.07.2021). Red line indicates planning application boundary and blue line indicates location of Broomfield Farm development. 10 Figure 2-6: Zone 2 Illustration (P0-MP-SPA-P4176-5IL-1000-0005 received from Spawforths 11.05.2021)

Figure 4-1: Environment Agency Flood Zone Map, with site location indicated by the red line boundary (Contains Environment Agency information © Environment Agency and database right)

Figure 4-2: Environment Agency surface water flood map, with indicative site boundary marked in red (Contains Environment Agency information © Environment Agency and database right)18

Figure 4-3: Environment Agency extent of flooding from reservoirs map, with indicative site boundary marked in red (Contains Environment Agency information © Environment Agency and database right)

## Abbreviations

| Term | Definition |
| :--- | :--- |
| BGS | British Geological Survey |
| EA | Environment Agency |
| FRA | Flood Risk Assessment |
| mAOD | metres Above Ordnance Datum |
| NEY | North East Yorkshire |
| NPPF | National Planning Policy Framework |
| NYCC | North Yorkshire County Council |
| SFRA | Strategic Flood Risk Assessment |
| SuDS | Sustainable Drainage Systems |
| WWTP | Wastewater Treatment Plant |
| YW | Yorkshire Water |

## 1 Executive Summary

This Flood Risk Assessment (FRA) has been carried out as part of the Full Planning Application for vehicle access and landscaping to support residential development on neighbouring Broomfield Farm, Stainacre Lane, Whitby.

This FRA has been prepared in accordance with the National Planning Policy Framework (NPPF) (February 2019) and NPPF Planning Practice Guidance. The assessment takes the latest climate change guidance into account and also refers to the North Yorkshire County Council Sustainability Appraisal Strategic Flood Risk Assessment (October 2016), the North East Yorkshire Strategic Flood Risk Assessment (February 2010) and the Scarborough Borough Local Plan (July 2017).

The FRA contains an assessment of the risk associated with each of the following flood sources:
Rivers and the sea (fluvial and tidal);
Surface water (pluvial);
Sewer and drainage infrastructure;
Groundwater; and
Reservoirs and Artificial Sources.
According to the national flood map produced by the Environment Agency (EA), the Site is located entirely within Flood Zone 1, which is classified as having a low risk of flooding from rivers and the sea. The nearest watercourse to the Site is Stainsacre Beck, located approximately 350 to the south of the Site. The River Esk runs approximately 1 km northwest of the Site. Tidal and fluvial flood risk are therefore considered to be low. In accordance with the NPPF, all the land uses for the proposed development are appropriate for Flood Zone 1. The proposed development consists of an access road and landscaping, which is classified as Less Vulnerable within the NPPF.

The existing risk of flooding from surface water is low. To maintain a low risk in the future, the proposals should not increase the runoff rates to surrounding areas. Sustainable drainage systems (SuDS) shall be implemented to manage and maintain existing rates of runoff from the Site including an allowance for climate change.

The risk of flooding from combined sewers for the Site is considered to be low.
The risk of groundwater flooding to the development is considered to be low.
The map showing the risk of flooding from reservoirs, produced by the EA, indicates that the Site is not located within the maximum extent of flooding that would occur if an upstream reservoir were to fail. The risk of flooding caused by the failure of a reservoir is therefore considered to be low.

## 2 Introduction

### 2.1 Background

This site-specific Flood Risk Assessment (FRA) has been prepared by Buro Happold Engineering (Buro Happold) to support a Full Planning Application made by KeyLand Developments Ltd. for Broomfield Farm - Zone 2 Access Road, hereafter referred to as the Site. The Full Planning Application is for vehicle access and landscaping to support residential development on neighbouring Broomfield Farm, Stainacre Lane, Whitby. This assessment has been developed in accordance with the National Planning Policy Framework (NPPF) ${ }^{1}$.

### 2.2 Site Description

Broomfield Farm - Zone 2 Access Road is located approximately 2 km southeast of Whitby town centre, with Ordnance Survey grid reference NZ 9100009044 . The area of the Site is approximately 2.4 ha. The Site is currently greenfield. A wastewater treatment plant (WWTP) is located southwest of the Site. See Figure 2-1.


Figure 2-1: Site location indicated by red line (© Google Maps)

[^1]Ground levels on the Site vary from approximately 80 mAOD in the south and 66mAOD in the north along Stainsacre Lane, as can be seen in Figure 2-2.


Figure 2-2: Levels across the Site (Contains Environment Agency information © Environment Agency and database right)
The nearest watercourse is Stainsacre Beck, approximately 350 m south of the Site, which connects with Cock Mill Beck before flowing to the River Esk (an EA Main River). See Figure 2-3.


Figure 2-3: Watercourses in proximity of the Site (Site indicated by red line) (© OS Maps data)
The online Geolndex tool produced by the British Geological Survey (BGS) ${ }^{2}$ indicates that the bedrock geology underlying the Site consists of sandstone, siltstone and mudstone. The bedrock is overlaid by a superficial deposit of Devensian Till, which are sedimentary deposits. The bedrock is classified as a Secondary A Aquifer. Furthermore, the Site is not situated within a Source Protection Zone.

### 2.3 Proposed Development

The planning application is for vehicle access and landscaping to support residential development on neighbouring Broomfield Farm, Stainacre Lane, Whitby. See Figure 2-1 and Appendix A.

[^2]

Figure 2-4: Location Plan (P4176-SPA-XX-ZZ-MP-00-022 received from Spawforths 08.07.2021). Red line indicates planning application boundary and blue line indicates location of Broomfield Farm development.


Figure 2-5: Zone 2 Illustration (P0-MP-SPA-P4176-5IL-1000-0005 received from Spawforths 11.05.2021)

## 3 Planning Context

### 3.1 Overview

This FRA has been prepared in accordance with the policies and guidance applicable to the proposed development, outlined within the following publications:

National Planning Policy Framework (February 2019);
National Planning Policy Framework Planning Practice Guidance;
North Yorkshire County Council Sustainability Appraisal Strategic Flood Risk Assessment (October 2016);
North East Yorkshire Strategic Flood Risk Assessment (February 2010); and
Scarborough Borough Local Plan (July 2017).

### 3.2 National Planning Policy Framework

### 3.2.1 Flood Zone Assessment

The National Planning Policy Framework ${ }^{3}$ (NPPF) aims to avoid inappropriate development in areas at highest risk of flooding. The Planning Practice Guidance to the NPPF ${ }^{4}$ contains a series of tables that help identify the risk of flooding to a development. These tables are duplicated in Appendix B.

Table 1 defines four Flood Zones by flood risk, gives the land use classification appropriate to the flood risk and specifies the requirements of a FRA within each zone;

Table 2 identifies specific land use types for each flood risk vulnerability classification given in Table 1. For example, hospitals and residential buildings are classified as more vulnerable; and

Table 3 identifies where development is appropriate for each flood risk vulnerability classification and whether the Exception Test is required.

The Flood Zones defined in the NPPF are as follows:
Flood Zone 1 Low probability
Land having a less than 1 in 1,000 annual probability of river or sea flooding.
Flood Zone 2 Medium probability
Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding.

Flood Zone 3a High probability

[^3]Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding.

Flood Zone 3b Functional floodplain
This zone comprises land where water has to flow or be stored in times of flood. Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency.

### 3.2.2 Climate Change

Allowances for the predicted effects of climate change should be taken into account when preparing site-specific flood risk assessments. The guidance ${ }^{5}$ published by the Environment Agency (EA) in July 2020 to support the NPPF contains sensitivity ranges that are recommended to be applied to peak rainfall intensities, peak river flows, sea level rise, offshore wind speeds and extreme wave heights. The general trend is for each parameter to increase in the future, which in turn increases the risk of flooding to any site. The recommended allowances for peak rainfall intensity are given in Table 1.

Table 1: Climate change allowances for peak rainfall intensity in small and urban catchments (Contains Environment Agency information © Environment Agency and database right)

| Allowance <br> category | Total potential <br> change anticipated <br> for 2015 to 2039 | Total potential <br> change anticipated <br> for 2040 to 2059 | Total potential <br> change anticipated <br> for 2070 to 2115 |
| :--- | :---: | :---: | :---: |
| Upper End | $+10 \%$ | $+20 \%$ | $+40 \%$ |
| Central | $+5 \%$ | $+10 \%$ | $+20 \%$ |

It is recommended by the EA that both the central and upper end allowances are assessed in order to understand the range of the impact.

### 3.3 Strategic Flood Risk Assessment

Local authorities are required to carry out a Strategic Flood Risk Assessment (SFRA), which is to be used by developers as guidance on the authority's approach to avoiding, reducing and managing flood risk.

The North Yorkshire County Council (NYCC) SFRA provides an overarching framework for local SFRAs and a review of existing SFRAs. It further considers the risk of flooding from the following potential sources:

Rivers and the sea (fluvial and tidal);
Surface water (pluvial);
Sewer and drainage infrastructure;
Groundwater; and
Reservoirs and Artificial Sources.

[^4]The risk of flooding to the proposed development from each flood source listed above will be assessed in Section Error! Reference source not found. of this report.

### 3.4 North East Yorkshire Strategic Flood Risk Assessment

The North East Yorkshire (NEY) SFRA, which essentially constitutes a Level 1 SFRA, provides further background on the data and methods used to developed SFRAs and assesses flood risk in key settlements in, amongst others, Scarborough Borough - where Whitby is located. According to the NEY SFRA (Section 11.7.7), no Critical Drainage Areas (CDAs) have been identified within the settlement or in the surrounding area. CDAs are, according to the Town and Country Planning Order, areas that are 'within Flood Zone 1 which has critical drainage problems and which has been notified...[to]...the local planning authority by the Environment Agency'.

### 3.5 Scarborough Borough Local Plan

The Local Plan sets out the planning vision and a strategy for growth up to 2032 in Scarborough Borough. It is intended to contribute towards the vision and objectives of the Sustainable Community Strategy for the Borough and help other Borough Council services and external partners deliver their own programmes. The Local Plan includes:

Spatial Development Strategy - this sets out a hierarchy of settlements and recognises their individual roles in the plan area;

Development Management Policies - this sets out the policies to be used by the Local Planning Authority when making decisions on applications for planning permission; and

Site Allocations - this provides the site specific details and allocates sites for housing, industrial development and other land uses.

The local plan sets out nine spatial objectives which have associated policies and desired outcomes. Objective 9 is related to Resource Use and Climate Change and seeks 'to promote the efficient use of resources, adapt to climate change and reduce environmental risks where possible'. The outcomes include minimising and mitigating the effects of climate change and implications associated with environmental risk, including flood risk, drainage and coastal erosion. Additionally, water resources should be used efficiently, and the quality and ecological status of waterbodies shall achieve "good" status in line with the Water Framework Directive.

Policy ENV 3, on Environmental Risk, which is expected to mitigate the implications of environmental risk and the effects of climate change, requires:

- avoiding development in high flood risk areas by following a sequential approach in giving priority to lowest risk areas as identified by the North-East Yorkshire Strategic Flood Risk Assessment or any subsequent update or replacement. Where the Sequential Test cannot be passed, the Exception Test should be utilised in order to demonstrate whether the development's wider benefits to the community outweigh the flood risks, whether the development can be made safe, and whether it has, wherever possible, reduced flood risk overall;
- seeking opportunities from new development that may help to reduce the causes and impacts of flooding, and safeguarding land which is needed for flood risk management purposes (as identified in DEFRA's Programme of flood and coastal erosion risk management schemes and other Environment Agency or Lead Local Flood Authority documents);
- ensuring water supply and water resources are managed and water efficiency measures are incorporated to reduce resource need, in line with the Environment Agency's licensing strategies;
- using mitigation measures such as Sustainable Drainage Systems where possible in order to facilitate development in areas of sensitive drainage and to meet the requirements of the Water Framework Directive;
- ensuring development has adequate provision for foul and surface water disposal in advance of occupation; and
- ensuring development does not lead to pollution of controlled waters in line with the requirements of the Water Framework.

Policy ENV 4 on Groundwater Protection sets out that proposals will have to demonstrate that they do not compromise groundwater and its abstraction and within the defined Source Protection Zones.

## 4 Appraisal and Mitigation of Flood Risk

### 4.1 National Planning Policy Framework

### 4.1.1 Flood Zone

The Flood Zone mapping produced by the Environment Agency (EA) shows that the proposed development lies entirely within Flood Zone 1. This is shown in Figure 4-1.

Flood Zone 1 is defined as an area with an annual probability of flooding from rivers or the sea of less than $0.1 \%$.
By definition, the risk of flooding from rivers or the sea in Flood Zone 1 is classified as low. In line with EA guidance, the focus of this FRA will therefore be on the management of surface water run-off to ensure that the risk of fluvial flooding to other surrounding areas is not increased and the risk of flooding from other sources.


Figure 4-1: Environment Agency Flood Zone Map, with site location indicated by the red line boundary (Contains Environment Agency information © Environment Agency and database right)

### 4.1.2 Flood Risk Vulnerability Classification

The NPPF Planning Practice Guidance contains a series of tables which identify where development should be permitted, based on the Flood Zone in which the development is located and the proposed uses of that development. These tables are included in Appendix B.

The proposed development consists of an access road and landscaping, which is classified as Less Vulnerable within the NPPF.

### 4.2 Flood Risk to Proposed Development

### 4.2.1 Fluvial and Tidal Flooding

Fluvial flooding occurs when sustained or intense rainfall events increase the flow in rivers causing the water level to rise above the level of the banks and into the surrounding areas.

Flooding of rivers is usually caused by prolonged intense rainfall, often intensified by changes in the drainage regime or restrictions in a watercourse's capacity to flood adjacent land further up the catchment. Soil permeability and other factors such as the extent to which surfaces over which runoff can flow are paved, compacted or covered by trees and vegetation also affects the rate at which water enters rivers.

The nearest watercourse is Stainsacre Beck, approximately 350 m south of the Site, which connects with Cock Mill Beck before flowing to the River Esk. Since the proposed development is located within Flood Zone 1, which is defined as having a low risk of flooding from rivers and the sea, it is not considered that additional measures are required to reduce the flood risk to the Site.

Tidal flooding occurs when particularly high tides coincide with storm surges. Storm surges are caused by low atmospheric pressure events resulting in temporary localised raising of sea levels. The River Esk is tidal up until a weir at Turnerdale Hall, which is situated approximately 2 km upstream of Whitby and thus also upstream of the Site, but the River Esk is located approximately 1 km away from the Site and does therefore not pose a risk of tidal flooding.

Based on the topography of the Site, it appears that the Site drains northwards towards Stainsacre Lane. The Site is located at a distance and a higher topography than the watercourses that are in Flood Zone 3.

The future potential flooding from fluvial and tidal sources due to climate change for the Site is considered to be low due to the higher elevation of the Site and distance from the watercourses. Although the flood extent could increase in the future it is not considered to encroach onto the development Site.

It is considered that there is safe access and egress to the site now and in the future.

### 4.2.2 Surface Water Flooding

Surface water flooding occurs when intense rainfall is unable to naturally soak into the ground due to impermeable ground covering such as concrete or tarmac, or low permeability ground conditions preventing infiltration. This excess surface water can flow through built-up areas and open space and pond in lower-lying areas causing localised flooding.

## Baseline

The surface water flood map produced by the EA (Figure 4-2) indicates that the entire Site is classified as having a very low risk of surface water flooding.


Figure 4-2: Environment Agency surface water flood map, with indicative site boundary marked in red (Contains Environment Agency information © Environment Agency and database right)

The existing Site is a greenfield area, thus not covered by impermeable surfaces. During a rainfall event, there is therefore potential for infiltration, meaning that rainfall falling on the Site would not directly be converted to surface water run-off which, in turn, can result in surface water flooding.

No known surface water attenuation measures are currently present on the Site.

## Proposed Surface Water Drainage Strategy

The topography of the Site indicates that surface water runoff will drain north and discharge to the public sewer in Fairfield Way, north of Stainsacre Lane. It is proposed to drain surface water at a restricted rate to this public sewer. Capacity is to be confirmed with Yorkshire Water (YW). To ensure greenfield runoff rates from the Site, SuDS will be implemented to compensate for the change from pervious to impervious surfaces and located parallel to the proposed road to intercept and capture runoff from the road. SuDS, such as filter strips will also improve the water quality. Shallow soakage systems and infiltration of water might be a challenge if the soil conditions have low infiltration rates and therefore space alongside the road has been provided to allow the SuDS to be sized accordingly to convey and attenuate runoff to existing greenfield rates.

### 4.2.3 Flooding from Combined Sewers

Flooding from combined sewers may occur during periods of intense rainfall when high volumes of surface water runoff exceed the capacity of the drainage system water can be forced back up through surface water sewers or combined sewer overflows.

## Baseline

As the Site is greenfield, there are no combined sewers serving buildings on the Site itself. According to YW record drawings (Appendix C) there are no combined sewers on the Site itself, but indicate several existing assets in proximity of the site, summarised below:

- Two rising mains, to the south-east of the Site, connecting to the WWTP.
- A rising main, passing south of the Site, connecting to the WWTP.
- A 375 mm dia. gravity combined sewer connecting to the southern side of the WWTP.
- A 225 mm dia. gravity combined sewer located north-west of the Site in Stainsacre Lane.
- A 225 mm dia. surface water sewer in Fairfield Way, north .
- A 300 mm dia. surface water sewer in Fairfield Way.

Any floodwater resulting from a surcharge of manholes from the combined sewer located along Stainsacre Road, north of the Site, will flow north away from the Site based on the topography flowing north along Fairfield Way. It is further assumed that a surcharge of the combined sewer connecting to the southern side of the WWTP located southwest of the Site will drain south-west away from the Site based on the topography. The surface water sewers located in Fairfield Way will also drain away from the Site.

## Proposed Foul Water Drainage Strategy

Seeing as the proposed development on the Site consists of an access road and landscaping, no foul water drainage strategy is proposed. The foul water drainage strategy for the adjacent residential development on neighbouring Broomfield Farm, Stainacre Lane, Whitby is understood to not increase the risk of combined surface water flooding for neighbouring areas and thus the risk of combined sewer flooding to the Site is low.

### 4.2.4 Groundwater Flooding

Groundwater flooding generally occurs in low-lying areas above permeable rock aquifers where the water table meets, and rises above, the ground surface. According to the BGS, groundwater flooding 'occurs as a result of water rising up from the underlying rocks or from water flowing from dormant springs. This tends to occur after long periods of sustained high rainfall. Higher rainfall means more water will infiltrate into the ground and cause the water table to rise above normal levels'.

The online Geolndex tool produced by the BGS indicates that the bedrock geology underlying the Site consists of sandstone, siltstone and mudstone. The bedrock is overlaid by a superficial deposit of Devensian Till, which are sedimentary deposits. Maps created using the Geolndex tool are given in Appendix $D$ and Appendix $E$.

The bedrock is classified as a Secondary A Aquifer. A Secondary A Aquifer is, according to the EA, permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers. The Site is not situated within a Source Protection Zone.

Furthermore, according to the NYCC Sustainability Appraisal SFRA most of the catchment has a relatively low proportion of land area that is susceptible to groundwater flooding.

As the proposal only includes an access road and landscaping, the risk of groundwater flooding to the proposal is found to be low.

### 4.2.5 Flooding from Reservoirs and Artificial Sources

There are several non-natural sources of flood risk including flooding from canals, reservoirs and man-made lakes. These sources of flooding can occur when the facility is overwhelmed by high rainfall or when a dam or bank fails. Flooding from such sources can happen suddenly and can cause significant damage and danger to life.

The map showing the risk of flooding from reservoirs produced by the EA Figure 4-3 indicates that the Site is not located within the maximum extent of flooding that would occur if an upstream reservoir were to fail. The risk of flooding caused by the failure of a reservoir is therefore considered to be low and mitigation is not required.

Canals may flood in a similar fashion to reservoirs, for instance by overtopping as facilities become overwhelmed or as a result of bank failure. As with reservoirs, water can be released quickly from canal floods. There are no canals within proximity of the Site. The risk of flooding from canals is therefore considered to be low and mitigation is not required.


Figure 4-3: Environment Agency extent of flooding from reservoirs map, with indicative site boundary marked in red (Contains Environment Agency information © Environment Agency and database right)

## 5 Summary and Conclusion

This Flood Risk Assessment (FRA) has been carried out as part of the Full Planning Application for vehicle access and landscaping to support residential development on neighbouring Broomfield Farm, Stainacre Lane, Whitby.

This FRA has been prepared in accordance with the National Planning Policy Framework (NPPF) (February 2019) and NPPF Planning Practice Guidance. The assessment takes the latest climate change guidance into account and also refers to the North Yorkshire County Council Sustainability Appraisal Strategic Flood Risk Assessment (October 2016), the North East Yorkshire Strategic Flood Risk Assessment (February 2010) and the Scarborough Borough Local Plan (July 2017).

The FRA contains an assessment of the risk associated with each of the following flood sources:
Rivers and the sea (fluvial and tidal);
Surface water (pluvial);
Sewer and drainage infrastructure;
Groundwater; and

Reservoirs and Artificial Sources.
According to the national flood map produced by the EA, the Site is located entirely within Flood Zone 1, which is classified as having a low risk of flooding from rivers and the sea. The nearest watercourse to the Site is Stainsacre Beck, located approximately 350 m to the south of the Site. The River Esk runs approximately 1 km northwest of the Site. Tidal and fluvial flood risk are therefore considered to be low.

In accordance with the NPPF, the land uses for the proposed development are appropriate for Flood Zone 1. The proposed development consists of an access road and landscaping, which is classified as Less Vulnerable within the NPPF.

The existing risk of flooding from surface water is low. To maintain a low risk in the future, the proposals should not increase the runoff rates to surrounding areas. SuDS shall be implemented to maintain runoff values from the Site.

The risk of flooding from combined sewers on the Site is considered to be low.
The risk of groundwater flooding to the development is considered to be low.
The map showing the risk of flooding from reservoirs, produced by the EA, indicates that the Site is not located within the maximum extent of flooding that would occur if an upstream reservoir were to fail. The risk of flooding caused by the failure of a reservoir is therefore considered to be low.

The overall flood risk to the Site is found to be low and the development will not increase the flood risk for surrounding areas.

## Appendix A - Proposed Development Drawing



## Appendix B - Planning Practice Guidance Tables

## Table 1: Flood Zones

These Flood Zones refer to the probability of river and sea flooding, ignoring the presence of defences. They are shown on the Environment Agency's Flood Map for Planning_(Rivers and Sea), available on the Environment Agency's web site, as indicated in the table below.

| Flood Zone | Definition |
| :---: | :---: |
| Zone 1 <br> Low <br> Probability | Land having a less than 1 in 1,000 annual probability of river or sea flooding. (Shown as 'clear' on the Flood Map - all land outside Zones 2 and 3) |
| Zone 2 <br> Medium <br> Probability | Land having between a 1 in 100 and 1 in 1,000 annual probability of river flooding; or land having between a 1 in 200 and 1 in 1,000 annual probability of sea flooding. (Land shown in light blue on the Flood Map) |
| Zone 3a <br> High <br> Probability | Land having a 1 in 100 or greater annual probability of river flooding; or Land having a 1 in 200 or greater annual probability of sea flooding.(Land shown in dark blue on the Flood Map) |
| Zone 3b <br> The <br> Functional <br> Floodplain | This zone comprises land where water has to flow or be stored in times of flood. Local planning authorities should identify in their Strategic Flood Risk Assessments areas of functional floodplain and its boundaries accordingly, in agreement with the Environment Agency. (Not separately distinguished from Zone 3a on the Flood Map) |

Note: The Flood Zones shown on the Environment Agency's Flood Map for Planning (Rivers and Sea) do not take account of the possible impacts of climate change and consequent changes in the future probability of flooding. Reference should therefore also be made to the Strategic Flood Risk Assessment when considering location and potential future flood risks to developments and land uses.

Paragraph: 065 Reference ID: 7-065-20140306
Revision date: 06032014

## Table 2: Flood risk vulnerability classification

## Essential infrastructure

- Essential transport infrastructure (including mass evacuation routes) which has to cross the area at risk.
- Essential utility infrastructure which has to be located in a flood risk area for operational reasons, including electricity generating power stations and grid and primary substations; and water treatment works that need to remain operational in times of flood.
- Wind turbines.


## Highly vulnerable

- Police and ambulance stations; fire stations and command centres; telecommunications installations required to be operational during flooding.
- Emergency dispersal points.
- Basement dwellings.
- Caravans, mobile homes and park homes intended for permanent residential use.
- Installations requiring hazardous substances consent. (Where there is a demonstrable need to locate such installations for bulk storage of materials with port or other similar facilities, or such installations with energy infrastructure or carbon capture and storage installations, that require coastal or water-side locations, or need to be located in other high flood risk areas, in these instances the facilities should be classified as 'Essential Infrastructure').


## More vulnerable

- Hospitals
- Residential institutions such as residential care homes, children's homes, social services homes, prisons and hostels.
- Buildings used for dwelling houses, student halls of residence, drinking establishments, nightclubs and hotels.
- Non-residential uses for health services, nurseries and educational establishments.
- Landfill* and sites used for waste management facilities for hazardous waste.
- Sites used for holiday or short-let caravans and camping, subject to a specific warning and evacuation plan.


## Less vulnerable

- Police, ambulance and fire stations which are not required to be operational during flooding.
- Buildings used for shops; financial, professional and other services; restaurants, cafes and hot food takeaways; offices; general industry, storage and distribution; non-residential institutions not included in the 'more vulnerable' class; and assembly and leisure.
- Land and buildings used for agriculture and forestry.
- Waste treatment (except landfill* and hazardous waste facilities).
- Minerals working and processing (except for sand and gravel working).
- Water treatment works which do not need to remain operational during times of flood.
- Sewage treatment works, if adequate measures to control pollution and manage sewage during flooding events are in place.


## Water-compatible development

- Flood control infrastructure.
- Water transmission infrastructure and pumping stations.
- Sewage transmission infrastructure and pumping stations.
- Sand and gravel working.
- Docks, marinas and wharves.
- Navigation facilities.
- Ministry of Defence defence installations.
- Ship building, repairing and dismantling, dockside fish processing and refrigeration and compatible activities requiring a waterside location.
- Water-based recreation (excluding sleeping accommodation).
- Lifeguard and coastguard stations.
- Amenity open space, nature conservation and biodiversity, outdoor sports and recreation and essential facilities such as changing rooms.
- Essential ancillary sleeping or residential accommodation for staff required by uses in this category, subject to a specific warning and evacuation plan.
" * " Landfill is as defined in Schedule 10 of the Environmental Permitting_(England and Wales). Regulations 2010.

Paragraph: 066 Reference ID: 7-066-20140306
Revision date: 06032014

## Table 3: Flood risk vulnerability and flood zone 'compatibility'

Table 3: flood risk vulnerability and flood zone 'compatibility' (PDF, 58.1KB, 1 page)

## Key:

$\checkmark$ Development is appropriate
$X$ Development should not be permitted.

## Notes to table 3:

- This table does not show the application of the Sequential Testwhich should be applied first to guide development to Flood Zone 1, then Zone 2, and then Zone 3; nor does it reflect the need to avoid flood risk from sources other than rivers and the sea;
- The Sequential and Exception Tests do not need to be applied to minor developments and changes of use, except for a change of use to a caravan, camping or chalet site, or to a mobile home or park home site;
- Some developments may contain different elements of vulnerability and the highest vulnerability category should be used, unless the development is considered in its component parts.
$\dagger$ In Flood Zone 3a essential infrastructure should be designed and constructed to remain operational and safe in times of flood.
" * " In Flood Zone 3b (functional floodplain) essential infrastructure that has to be there and has passed the Exception Test, and water-compatible uses, should be designed and constructed to:
- remain operational and safe for users in times of flood;
- result in no net loss of floodplain storage;
- not impede water flows and not increase flood risk elsewhere.

Paragraph: 067 Reference ID: 7-067-20140306
Revision date: 06032014

| Flood <br> Zones | Flood Risk Vulnerability Classification <br> Essential <br> infrastructure |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Highly <br> vulnerable | More <br> vulnerable | Less <br> vulnerable | Water <br> compatible |  |  |
| Zone 1 | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Zone 2 | $\checkmark$ | Exception <br> Test <br> required | $\checkmark$ |  |  |
| Zone <br> 3a † | Exception <br> Test required <br> $\dagger$ | $x$ | Exception <br> Test <br> required | $\checkmark$ | $\checkmark$ |
| Zone <br> 3b * | Exception <br> Test required * | $x$ | $x$ | $x$ | $\checkmark$ |

Key:
$\checkmark$ Development is appropriate
$x$ Development should not be permitted.

## Appendix C - Yorkshire Water Asset Location



## Appendix D - British Geological Survey Geolndex Map Bedrock Geology



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Map Key
Bedrock geology 1:50,000 scale
    CLEVELANDIRONSTONE FORMATION - MUDSTONE,SANDSTONE ANDIRONSTONE
    ELLER BECK FORMATION - MUDSTONE, SANDSTONE AND IRONSTOME
    REDCAR MUDSTONE FORMATION - MUDSTONE
    STATHES SANDSTONE FORMATION - SANDSTONE
        LONG NAB MEMBER - SANDSTONE, SILTSTONE AND MUDSTONE
    MOOR GRIT MEMBER SANDSTONE
    WHITBY MUDSTONE FORMATION - MUDSTONE
    GLOUGHTON FORMATION - SANDSTONE, SILTSTONE AND MUDSTONE
    SCARBOROUGH FORMATION - MUDSTONE, SANDSTONE AND LIMESTONE
    DOGGER FORMATION - SANDSTONE
    IITMLGRAVE SHALEMEMBER - MUDSTONE
```


## Appendix E - British Geological Survey GeoIndex Map Superficial Deposits



[^5]

Map Key
Superficial deposits $1: 50,000$ scale

## TILL DEVENSIAN - DIAMICTON

ALLUVIUM - CLAY, SILT, SAND AND GRAVEL
RIVER TERRACE DEPOSITS (UNDIFFERENTIATED). SAND AND GRAVEL
BEACH AND TIDAL FLAT DEPOSTIS IUNDIFFERENTIATEDI. SAND AND GRAVEL
SUPERFICLAL THEME MOT MAPPED IFOR DIGTAL MAP USE ONLY. WATER, TYPE UNSPEGFIED

Sigrid Moeller
Buro Happold Limited
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# Broomfield Farm, Whitby, North Yorkshire - Zone 2 Access Road Heritage Assessment 

## Keyland Developments Ltd

## Introduction

Keyland Developments are making a full Planning Application for vehicle access and landscaping to support residential development on neighbouring Broomfield Farm, Stainacre Lane, Whitby. The site lies adjacent to the Broomfield Farm development site that has recently been granted planning permission for residential development.

As part of the work undertaken on the adjacent development site, this area was covered by desk-based assessment (ASUD 2019a) and geophysical survey (ASUD 2019b). An evaluation excavation which followed these initial pieces of work included Zone 2 but excluded the proposed access road (ASWYAS 2020, see Fig 1).

The site lies just within the boundary of the North York Moors National Park

Guidance used in the preparation of this statement includes:

- Chartered Institute for Archaeologists 2014 (updated 2020) Standard and guidance for historic environment desk-based assessment
- Historic England 2015 'Managing Significance in Decision-Taking in the Historic Environment, Historic Environment Good Practice Advice in Planning: 2’;
- English Heritage 2008 'Conservation Principles Policies and Guidance for the Sustainable Management of the Historic Environment' and
- Ministry of Housing, Communities and Local Government’s ‘National Planning Policy Framework’ (NPPF) and 'Planning Practice Guidance’ (PPG) in their most current forms.

Sources consulted:

- Heritage Gateway
- National Heritage List for England
- North Yorkshire Record Office (NYRO)
- Archaeological Services University of Durham (ASUD) 2019a Land to the South of Stainsacre Lane, Whitby, North Yorkshire: archaeological desk-based assessment Unpublished report 5151
- Archaeological Services University of Durham (ASUD) 2019b Land to the South of Stainsacre Lane, Whitby, North Yorkshire: geophysical survey Unpublished report 5140
- Archaeological Services WYAS (ASWYAS) 2020 Broomfield Farm, Whitby, North Yorkshire: Trial Trench Evaluation Unpublished report 3456
- Archaeological Services WYAS (ASWYAS) 2021 Broomfields Farm, Stainsacre Lane, Whitby, North Yorkshire: Strip, Map and Record Unpublished report 3602


Figure 1: Site under consideration in relation to previous archaeological work (after ASWYAS 2020)

## Baseline Conditions

There is extremely limited evidence for early prehistoric activity in the immediate environs contained within the HER. Two standing stones, modern replacements of earlier stones, located c. 800 m to the north of the Site are believed to potentially mark the position of prehistoric stones. However, they bear the names Robin Hoods and Little John and are also said to mark the position of a competition between the two mythological characters (Historic England Research Records Mon No 29561).

The best evidence for later prehistoric and Romano-British activity, however, comes from the evaluation and excavation undertaken on the development site to which this application relates. Although not identified by geophysical survey, and nearly missed in evaluation excavation, a Late Iron Age / Roman settlement was identified c. 500 m to the west of the current study site, in the region of trenches 1 and 2 of the evaluation (see Figures $1 \& 2$ ). The settlement features were heavily truncated by ploughing and land drains but represented at least two roundhouses with possible evidence of four-post structures believed to represent raised storage, later succeeded by a series of Romano-British enclosures. The evaluation had recorded pits containing iron-working debris of Iron Age date but no further such features were recorded in the mitigation works.


Figure 2: Plan of features identified in the north-west part of the Broomfield Farm Zone 1 development.
Within the application site, the geophysical survey shows an anomaly that could represent the backfilled ditch of a late prehistoric / Romano-British trackway.


Figure 3: Interpretation of geophysical survey within the Site. The green lines could represent backfilled ditches.

It is likely the Site lay within the open fields during the medieval period. Stainsacre, the closest settlement to the site, is recorded from the late $11^{\text {th }}$ century onwards. The geophysical survey undertaken across the current application site indicates the presence of ploughing activity, supporting the theory of the Site being in agricultural use during the medieval and post-medieval periods.

There is no evidence to suggest significant built development took place on the site in the medieval or postmedieval periods.

## Potential Effects of Development

The proposal would involve topsoil stripping for road formation and excavation of trenches for drainage and other utilities. This has the potential to impact on the possible trackway ditch identified in the geophysical survey. The backfilled ditch would be of no more than Local significance and the significance of the impact is therefore Low.

There would be no direct nor indirect impacts on the setting of any designated heritage assets.

## Conclusion

Development of this Site would not impact on any known designated or undesignated heritage assets.

The potential impacts on buried archaeology could be mitigated either through the excavation of an evaluation trench prior to development or monitoring of the topsoil strip during development. The significance of the potential archaeology is no more than Local and therefore the significance of the impact is Low.


[^0]:    Spawforths
    Junction 4I Business Court, East Ardsley, Leeds, West Yorkshire. WF3 2AB

[^1]:    ${ }^{1}$ Ministry of Housing, Communities and Local Government, (2019). National Planning Policy Framework.

[^2]:    ${ }^{2}$ Geoindex Onshore website, British Geological Survey: https://mapapps2.bgs.ac.uk/geoindex/home.html

[^3]:    ${ }^{3}$ Ministry of Housing, Communities and Local Government, (2019). National Planning Policy Framework.
    ${ }^{4}$ Ministry of Housing, Communities and Local Government, (2016). National Planning Policy Framework Planning Practice Guidance. [online] Available at: https://www.gov.uk/guidance/flood-risk-and-coastal-change. [Accessed 15 June 2021].

[^4]:    ${ }^{5}$ Environment Agency, (February 2016, updated July 2020). Flood risk assessments: climate change allowances. [online] Available at: https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances\#how-to-use-a-range-of-allowances-to-assess-flood-risk [Accessed 06 June 2021].

[^5]:    Coctains 05 data 0 Cromm Copyrigre and darabase nipt 2020

