



Land North of Straight Lane, New Romney, Kent,
TN29 9QT

Flood Risk Assessment

For Hammond & Searles Associates Ltd

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Land North of Straight Lane, New Romney, Kent, TN29 9QT

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Client	Hammond & Searles Associates Ltd
Status	Final
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EXECUTIVE SUMMARY

The Site would be expected to remain dry in all but the most extreme conditions. The consequences of flooding are acceptable, and the development would be in accordance with the requirements of the National Planning Policy Framework (NPPF). The Proposed Development would be operated with minimal risk from flooding, would not increase flood risk elsewhere and is compliant with the requirements of the NPPF.

The Proposed Development should not therefore be precluded on the grounds of flood risk or drainage.

1.0 INTRODUCTION

1.1 Background

This Flood Risk Assessment (FRA) has been prepared by KRS Enviro at the request of Hammond & Searles Associates Ltd to support a planning application for the the Proposed Development on Land North of Straight Lane, New Romney, Kent, TN29 9QT (“the Site”).

This FRA has been carried out in accordance with guidance contained in the National Planning Policy Framework (NPPF)¹, associated Planning Practice Guidance on flood risk and coastal change² (PPG) and the PPG ‘Site-specific flood risk assessment checklist’. This FRA identifies and assesses the risks of all forms of flooding to and from the development and demonstrates how these flood risks will be managed so that the development remains safe throughout the lifetime, taking climate change into account.

It is recognised that developments which are designed without regard to flood risk may endanger lives, damage property, cause disruption to the wider community, damage the environment, be difficult to insure and require additional expense on remedial works. The development design should be such that future users will not have difficulty obtaining insurance or mortgage finance, or in selling all or part of the development, as a result of flood risk issues.

1.2 National Planning Policy Framework (NPPF)

One of the key aims of the NPPF is to ensure that flood risk is taken into account at all stages of the planning process; to avoid inappropriate development in areas at risk of flooding and to direct development away from areas of highest risk.

It advises that where new development is exceptionally necessary in areas of higher risk, this should be safe, without increasing flood risk elsewhere, and where possible, reduce flood risk overall. A risk-based approach is adopted at stages of the planning process, applying a source pathway receptor model to planning and flood risk. To demonstrate this, an FRA is required and should include:

- whether a Proposed Development is likely to be affected by current or future flooding from all sources;
- whether it will increase flood risk elsewhere;
- whether the measures proposed to deal with these effects and risks are appropriate;
- if necessary, provide the evidence to the Local Planning Authority (LPA) that the Sequential Test can be applied; and
- whether the development will be safe and pass part c) of the Exception Test if this is appropriate.

The report findings are based upon professional judgement and are summarised below with detailed recommendations provided at the end of the report. The report includes rainfall data from the Flood Estimation Handbook (FEH) and hydrogeological information from the British

¹ Ministry for Housing, Communities and Local Government (2025) National Planning Policy Framework: <https://assets.publishing.service.gov.uk/media/675abd214cbda57cacd3476e/NPPF-December-2024.pdf>

² Communities and Local Government (2022) Planning Practice Guidance - Flood Risk and Coastal Change: <https://www.gov.uk/guidance/flood-risk-and-coastal-change>

Geological Survey (BGS). The assessment will summarise and refer to these datasets in the text.

1.3 Report Structure

This FRA has the following report structure:

- Section 2 describes the location and the existing and Proposed Development;
- Section 3 outlines the flood risk to the existing and Proposed Development;
- Section 4 describes the surface water drainage of the Proposed Development;
- Section 5 describes the risk management methods used to mitigate all sources of flood risk; and
- Section 6 presents a summary and conclusions.

2.0 LOCATION & DEVELOPMENT DESCRIPTION

2.1 Site Location

The Site is located on Land North of Straight Lane, New Romney, Kent, TN29 9QT (see Figure 1).

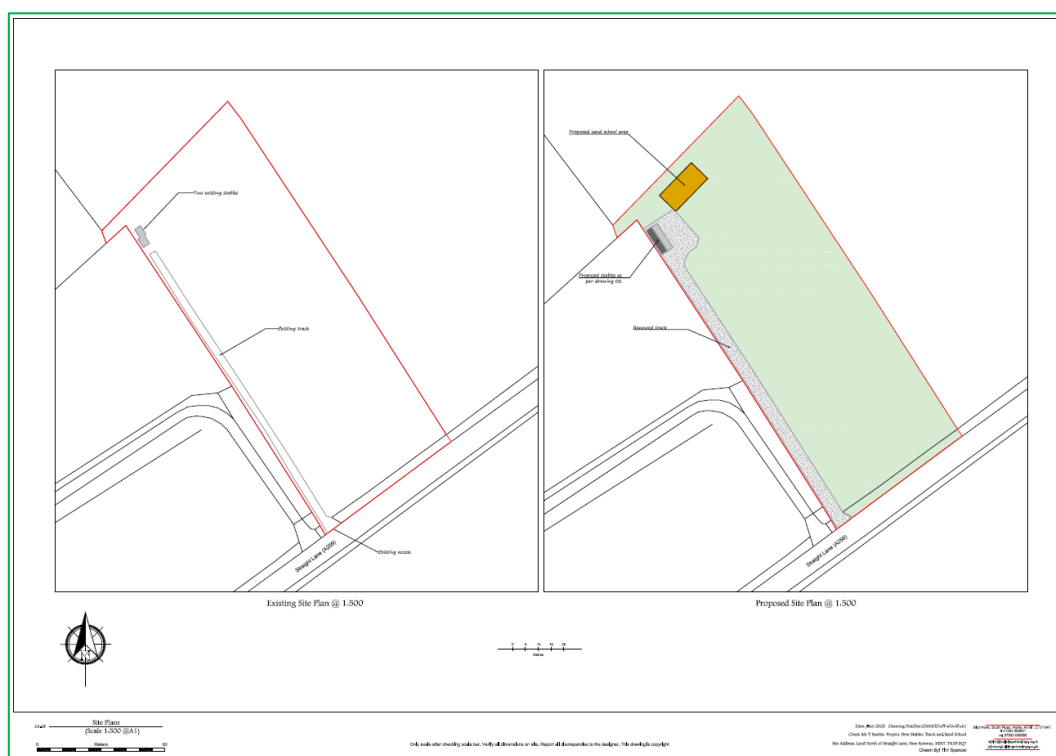


Figure 1 - Site Location

2.2 Existing Development

The Site currently consists of a field and stables (see Appendix 1).

2.3 Proposed Development

It is understood the Proposed Development is for a new stables, sand school and access track (see Appendix 1). Further details with regard to the Proposed Development can be found in the accompanying information submitted with the planning application.

2.4 Ground Levels

The Site is relatively flat with a ground levels of 1.70 to 1.80 metres Above Ordnance Datum (mAOD), as shown on the Ordnance Survey Datum Digital Terrain Model (DTM).

2.5 Catchment Hydrology

The English Channel is located approximately 9km to the east of the Site. A number of small watercourses and drainage ditches are located within the vicinity of the Site, the nearest of these is located approximately 20m to the south of the Site. These watercourses and drainage ditches form part of the New Romney Main Sewer.

2.6 Ground Conditions

The British Geological Survey (BGS) map³ shows that the bedrock deposits underneath the Site consist of the Wealden Group - sandstone, siltstone and mudstone. The superficial deposits consist of Tidal flat deposits - sand. Information from the National Soil Resources Institute⁴ details the Site area as being situated on loamy and clayey soils of coastal flats with naturally high groundwater.

The Environment Agency has designated the bedrock and superficial deposits as Secondary A Aquifers- 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 located within an Environment Agency Source Protection Zone (SPZ).

³ https://mapapps2.bgs.ac.uk/geoindex/home.html?_ga=2.14476159.932338379.1655890995-1831306757.1655472887

⁴ <http://www.landis.org.uk/soilscapes/>

3.0 FLOOD RISK

3.1 Sources of Flooding

All sources of flooding have been considered, these are; fluvial (river) flooding, tidal (coastal) flooding, groundwater flooding, surface water (pluvial) flooding, sewer flooding and flooding from artificial drainage systems/infrastructure failure.

3.2 Environment Agency

The Flood and Water Management Act 2010 gives the Environment Agency a strategic overview role for all forms of flooding and coastal erosion. They also have direct responsibility for the prevention, mitigation and remediation of flood damage for main rivers and coastal areas. The Environment Agency is the statutory consultee with regards to flood risk and planning. Information regarding the current flood risk at the application Site and local flood defences has been obtained from the Environment Agency (see Appendix 2).

3.3 Folkestone and Hythe District Council

Folkestone and Hythe District Council is the Local Planning Authority (LPA). Planning guidance written by Folkestone and Hythe District Council regarding flood risk was consulted to assess the mitigation policies in place. The Folkestone and Hythe District Council Strategic Flood Risk Assessment (SFRA) which covers the Site has been reviewed.

3.4 Kent County Council

Kent County Council is the Lead Local Flood Authority (LLFA) and has responsibilities for 'local flood risk', which includes surface runoff, groundwater and ordinary watercourses. The Kent County Council Preliminary Flood Risk Assessment (SFRA) which covers the Site has been reviewed.

3.5 Climate Change

Projections of future climate change, in the UK, indicate more frequent, short-duration, high intensity rainfall and more frequent periods of long duration rainfall. Guidance included within the NPPF recommends that the effects of climate change are incorporated into FRA's. Recommended precautionary sensitivity ranges for peak rainfall intensities and peak river flows are outlined in the flood risk assessments: climate change allowances guidance⁵. Table 1 shows the sea level allowances by river basin district.

The flood risk assessments: climate change allowances guidance recommends that the central allowances are used to assess climate change throughout the lifetime of the Proposed Development which is 75 years. Therefore, the tidal design event for the Site is the 1 in 200 year in 2100 event.

Table 1 - Sea Level Allowances by River Basin District (mm)

Area of England	Allowance Category	2000 to 2035	2036 to 2065	2066 to 2095	2096 to 2125
South East	Higher Central	5.70	8.70	11.60	13.10
	Upper End	6.90	11.30	15.80	18.20

⁵ <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances#high-allowances>

3.6 Environment Agency Flood Zones

A review of the Environment Agency’s Flood Zones indicates that the Site is located within Flood Zone 2 and therefore has a ‘medium probability’ of flooding (see Figure 2). Flood Zone 2 has between a 1 in 200 and 1 in 1000 annual probability of tidal flooding (0.5%-0.1%) in any year.

The Flood Zones are the current best information on the extent of the extremes of flooding from rivers or the sea that would occur without the presence of flood defences, because these can be breached, overtopped and may not be in existence for the lifetime of the development. They show the worst case scenario.

The Environment Agency Flood Zones and acceptable development types are explained in Table 2. Table 2 shows that most development types are generally acceptable in Flood Zone 2.

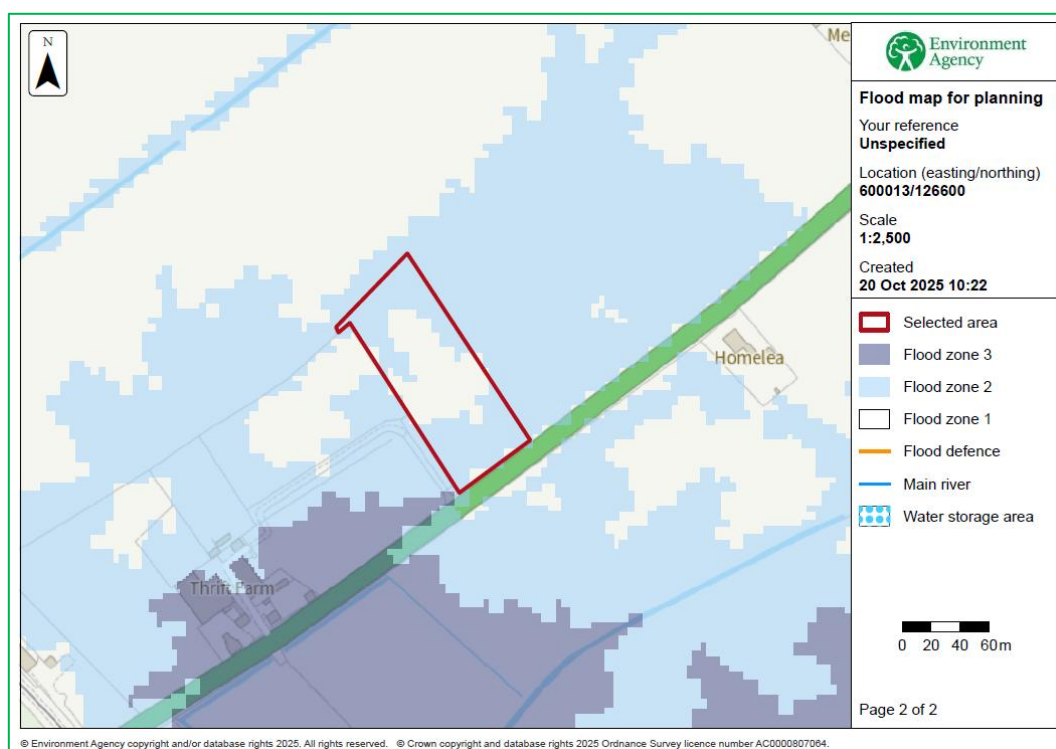


Figure 2 - Environment Agency Flood Zones

Table 2 - Environment Agency Flood Zones and Appropriate Land Use

Flood Zone	Probability	Explanation	Appropriate Land Use
Zone 1	Low	Less than a 1 in 1000 annual probability of river or sea flooding in any year (<0.1%)	All development types generally acceptable
Zone 2	Medium	Between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% - 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% 0.1%) in any year	Most development type are generally acceptable
Zone 3a	High	A 1 in 100 or greater annual probability of river flooding (>1%) or a 1 in 200 or greater annual	Some development

		probability of flooding from the sea (>0.5%) in any year	types not acceptable
Zone 3b	'Functional Floodplain'	<p>This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise:</p> <ul style="list-style-type: none"> land having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding). <p>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)</p>	Some development types not acceptable

3.7 Flood Vulnerability

In the PPG, appropriate uses have been identified for the Flood Zones. Applying the Flood Risk Vulnerability Classification in the PPG. The existing and proposed use is classified as 'less vulnerable'. The Proposed Development will not change the vulnerability of the Site to flooding or lead to a new 'more vulnerable' use in the floodplain.

Table 3 of this report and the PPG to the NPPF state that 'less vulnerable' uses are appropriate within Flood Zones 2 after the completion of a satisfactory FRA.

Table 3 - Flood Risk Vulnerability and Flood Zone 'Compatibility'

Flood Risk Vulnerability Classification	Essential Infrastructure	Water Compatible	Highly Vulnerable	More Vulnerable	Less Vulnerable
Zone 1	✓	✓	✓	✓	✓
Zone 2	✓	✓	Exception test required	✓	✓
Zone 3a	Exception test required	✓	✗	Exception test required	✓
Zone 3b 'Functional Floodplain'	Exception test required	✓	✗	✗	✗

Key: ✓: Development is appropriate, ✗: Development should not be permitted.

3.8 Sequential and Exception Tests

The NPPF requires that the Sequential and Exception Tests should be applied when choosing the location of new development and the layout of the Site. The Sequential Test aims to

promote development in low flood risk areas. The Exception Test is used where no suitable development areas can be found in low-risk zones.

The Sequential Test should be applied to identify suitable sites which are at low risk from all sources of flooding, avoiding medium and high-risk areas where possible. If no suitable areas can be identified in low-risk areas, then sites with the lowest flood risk should be considered next. If development is necessary within a medium or high-risk zone, an Exception Test may be required to demonstrate the need for the development in that location and plans to mitigate the flood risk. It should be noted that the Proposed Development will be located within Flood Zone 2 and therefore, the Exception Test is not required to be passed.

3.9 Historic Flooding

The Environment Agency data shows that the Site has not historically flooded. There are no records of anecdotal information of flooding at the Site. The British Hydrological Society “Chronology of British Hydrological Event⁶” has no information on flooding within the vicinity of the Site. No other historical records of flooding for the Site have been recorded. Therefore, it can be concluded that the Site has not flooded historically.

3.10 Existing and Planned Flood Defence Measures

The Environment Agency has confirmed that although there are no formal flood defences in the immediate vicinity of the Site, the Site currently benefits from the Lydd Ranges Scheme which has a design life of 25 years from 2020 with a 1 in 200 year (0.5% AEP) Standard of Protection (SoP). Further property level protection measures will be used to protect the Site from flooding these are discussed in Section 5.0.

3.11 Fluvial (River) Flooding

A number of small watercourses and drainage ditches are located within the vicinity of the Site, the nearest of these is located approximately 20m to the south of the Site. These watercourses and drainage ditches form part of the New Romney Main Sewer, and are therefore maintained. All the watercourses and drainage ditches are predominantly used for land irrigation and drainage or ‘wet fencing’.

Flood risk to the Site from these watercourses can be considered to be limited, since the watercourses are located a minimum of 20m to the south of the Site. Any overbank flow would follow the contours of the surrounding area and would flow away from the Site rather than flowing towards the Site. The flood risk can also be considered to be limited due to the difference in elevations. The ground levels of the Site are located above the normal water level of these watercourses.

Therefore, it can be concluded that these watercourses pose a very low flood risk to the Site. Given the scale and nature of the Proposed Development and the size and location of the fluvial flooding sources it has been concluded that the risk of fluvial flooding is considered to be **not significant**.

3.12 Tidal (Coastal) Flooding

Tidal flooding poses the primary flood risk to the Site from the English Channel which is located approximately 9km to the east of the Site. The Environment Agency has provided modelled outputs from the Romney Marsh Tidal Mapping Study, completed by JBA Consulting in 2020. This modelling includes sea level rises of 0.521m to 2070 and 1.166 to

⁶ https://www.hydrology.org.uk/Chronology_of_British_Hydrological_Events

2115 which is appropriate for use within this FRA when the lifetime of the development is for 75 years and until 2100. Figure 3 shows the modelled floodplain node locations.

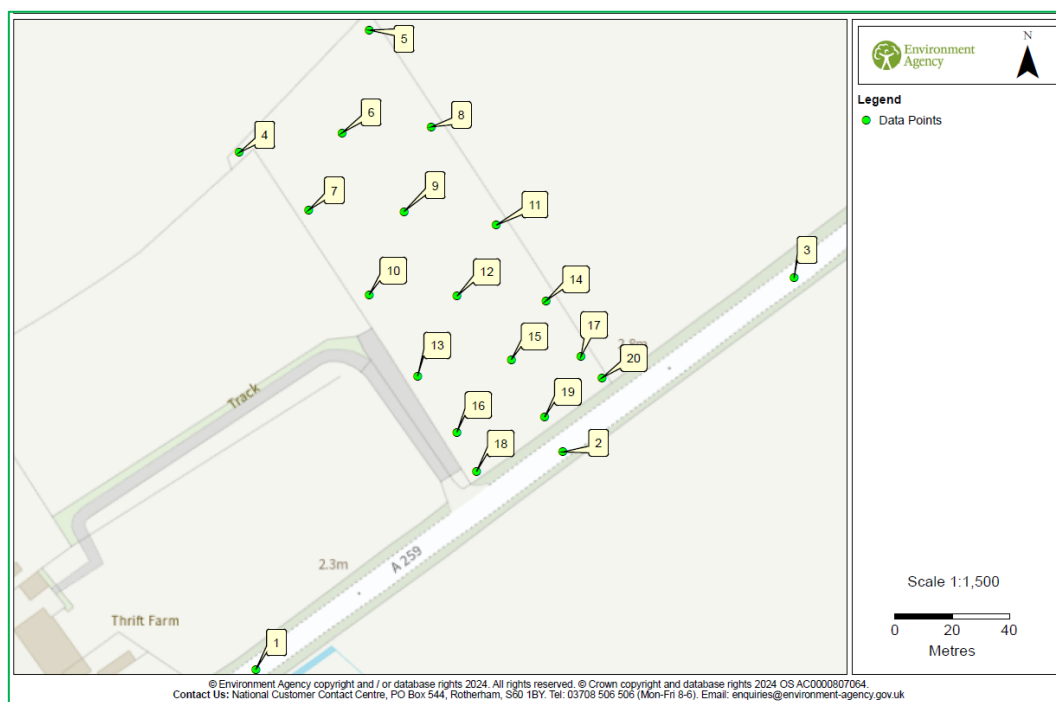


Figure 3 - Environment Agency Modelled Floodplain Nodes

Actual Defended Risk

Table 4 shows the defended Environment Agency modelled water levels for the Site. The modelled water levels have been compared to the ground level of the Site and areas within the vicinity of the Site to assess the flood risk at the Site in detail.

The Site will not be inundated with floodwater for all events up to and including the defended 1 in 1000 year in 2115 event. The Site will be flood free during the defended 1 in 1000 year in 2115 event, as shown in Figure 4. Therefore, the Site will be flood free during the design event which is the 1 in 200 year in 2100 event. The flood risk posed to the Site can therefore, be deemed a residual risk.

Table 4 - Environment Agency Defended Modelled Water Levels (mAOD)

Node Label	Easting	Northing	Return Period (years)							
			5	20	50	75	200	1000	200 in 2115	1000 in 2115
1	599954	126454	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	600061	126530	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	600142	126591	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	599948	126635	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	599994	126678	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	599984	126642	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	599973	126615	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	600015	126644	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

9	600006	126615	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	599994	126585	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	600038	126610	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	600024	126585	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	600011	126557	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	600056	126583	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	600043	126563	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	600024	126537	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	600068	126564	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	600031	126524	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	600055	126543	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	600075	126556	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:

Values of 0.00 indicate locations at which the selected points lie outside of a particular modelled flood extent. Climate change (CC) data represents modelled levels with an allowance for sea level rise for the years specified. In addition to sea level rise, the model applied an increase of 10% to both offshore wind speed and wave height for the 2070 and 2115 epochs. This is in line with 2016 NPPF guidance which has since been updated.

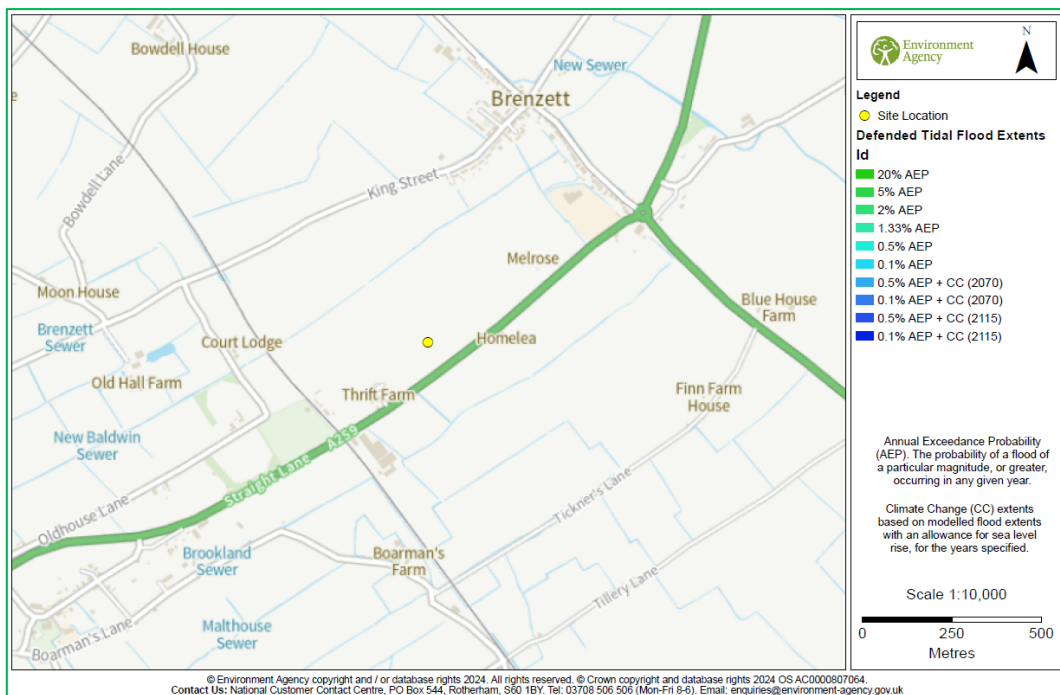


Figure 4 - Environment Agency Defended Modelled Flood Outlines

Residual Undefended Risk

The flood defences can only protect up to a point, they may malfunction, can be breached and have a finite structure life. Therefore, there is a residual risk of tidal flooding. If the flood defences were not there, the area would be flooded. However, an area of land may benefit from the presence of flood defences even if the flood defences are overtopped, the presence of the flood defences means that the floodwater does not extend as far as it would if the flood defences were not there.

Table 5 show the undefended Environment Agency floodplain water levels and Table 6 shows the undefended Environment Agency floodplain water depths for the Site. The

modelled water levels and depths have been compared to the ground level of the Site and areas within the vicinity of the Site to assess the flood risk at the Site in detail.

The Site will not be inundated with floodwater for all events up to and including the undefended 1 in 200 year event. The Site will be flood free during the undefended 1 in 200 year event, as shown in Figure 5.

It is only when climate change is taken into account of flood events of a greater magnitude were to occur that the Site may be inundated with floodwater. During the 1 in 100 year event the Site may be inundated with floodwater to a maximum depth of 0.24m in the very north west of the Site however, the majority of the Site would not be inundated with floodwater during this flood vent. The majority of the Site would be flood free during the 1 in 1000 year event. During the 1 in 200 year in 2115 event flood depths of over 1.50m may be experienced on the Site.

Table 5 - Environment Agency Undefended Modelled Water Levels (mAOD)

Node Label	Easting	Northing	Return Period (years)									
			5	20	50	75	200	1000	200 in 2070	1000 in 2070	200 in 2115	1000 in 2115
1	599954	126454	0.00	0.00	0.00	0.00	2.29	2.60	3.41	3.55	4.45	4.62
2	600061	126530	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.62
3	600142	126591	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.62
4	599948	126635	0.00	0.00	0.00	0.00	0.00	2.59	3.41	3.55	4.45	4.61
5	599994	126678	0.00	0.00	0.00	0.00	0.00	2.57	3.41	3.55	4.45	4.61
6	599984	126642	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
7	599973	126615	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
8	600015	126644	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
9	600006	126615	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
10	599994	126585	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
11	600038	126610	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
12	600024	126585	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
13	600011	126557	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.62
14	600056	126583	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.62
15	600043	126563	0.00	0.00	0.00	0.00	0.00	2.57	3.41	3.55	4.45	4.62
16	600024	126537	0.00	0.00	0.00	0.00	0.00	2.60	3.41	3.55	4.45	4.62
17	600068	126564	0.00	0.00	0.00	0.00	0.00	2.56	3.41	3.55	4.45	4.62
18	600031	126524	0.00	0.00	0.00	0.00	0.00	2.60	3.41	3.55	4.45	4.62
19	600055	126543	0.00	0.00	0.00	0.00	0.00	2.60	3.41	3.55	4.45	4.62
20	600075	126556	0.00	0.00	0.00	0.00	0.00	2.56	3.41	3.55	4.45	4.62

Notes:

Values of 0.00 indicate locations at which the selected points lie outside of a particular modelled flood extent.

Climate change (CC) data represents modelled levels with an allowance for sea level rise for the years specified. In addition to sea level rise, the model applied an increase of 10% to both offshore wind speed and wave height for the 2070 and 2115 epochs. This is in line with 2016 NPPF guidance which has since been updated.

The undefended model scenarios are still water only and did not include any inflow boundaries for wave overtopping.

Table 6 - Environment Agency Undefended Modelled Water Depths (m)

Node Label	Easting	Northing	Return Period (years)									
			5	20	50	75	200	1000	200 in 2070	1000 in 2070	200 in 2115	1000 in 2115
1	599954	126454	0.00	0.00	0.00	0.00	0.13	0.44	1.24	1.39	2.29	2.45
2	600061	126530	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.75	1.65	1.81
3	600142	126591	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.66	1.56	1.73
4	599948	126635	0.00	0.00	0.00	0.00	0.00	0.24	1.06	1.20	2.10	2.26
5	599994	126678	0.00	0.00	0.00	0.00	0.00	0.21	1.05	1.20	2.10	2.26
6	599984	126642	0.00	0.00	0.00	0.00	0.00	0.00	0.85	1.00	1.89	2.06
7	599973	126615	0.00	0.00	0.00	0.00	0.00	0.00	0.89	1.04	1.94	2.10
8	600015	126644	0.00	0.00	0.00	0.00	0.00	0.00	0.88	1.02	1.92	2.08
9	600006	126615	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.92	1.81	1.98
10	599994	126585	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.92	1.82	1.98
11	600038	126610	0.00	0.00	0.00	0.00	0.00	0.00	0.86	1.01	1.91	2.07
12	600024	126585	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.91	1.81	1.97
13	600011	126557	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.96	1.86	2.03
14	600056	126583	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.99	1.89	2.05
15	600043	126563	0.00	0.00	0.00	0.00	0.00	0.03	0.86	1.01	1.91	2.07
16	600024	126537	0.00	0.00	0.00	0.00	0.00	0.10	0.90	1.05	1.95	2.11
17	600068	126564	0.00	0.00	0.00	0.00	0.00	0.12	0.96	1.11	2.01	2.17
18	600031	126524	0.00	0.00	0.00	0.00	0.00	0.04	0.78	0.93	1.83	1.99
19	600055	126543	0.00	0.00	0.00	0.00	0.00	0.02	0.81	0.96	1.85	2.02
20	600075	126556	0.00	0.00	0.00	0.00	0.00	0.12	0.88	1.02	1.92	2.09

Notes:

Values of 0.00 indicate locations at which the selected points lie outside of a particular modelled flood extent.

Climate change (CC) data represents modelled levels with an allowance for sea level rise for the years specified. In addition to sea level rise, the model applied an increase of 10% to both offshore wind speed and wave height for the 2070 and 2115 epochs. This is in line with 2016 NPPF guidance which has since been updated.

The undefended model scenarios are still water only and did not include any inflow boundaries for wave overtopping.

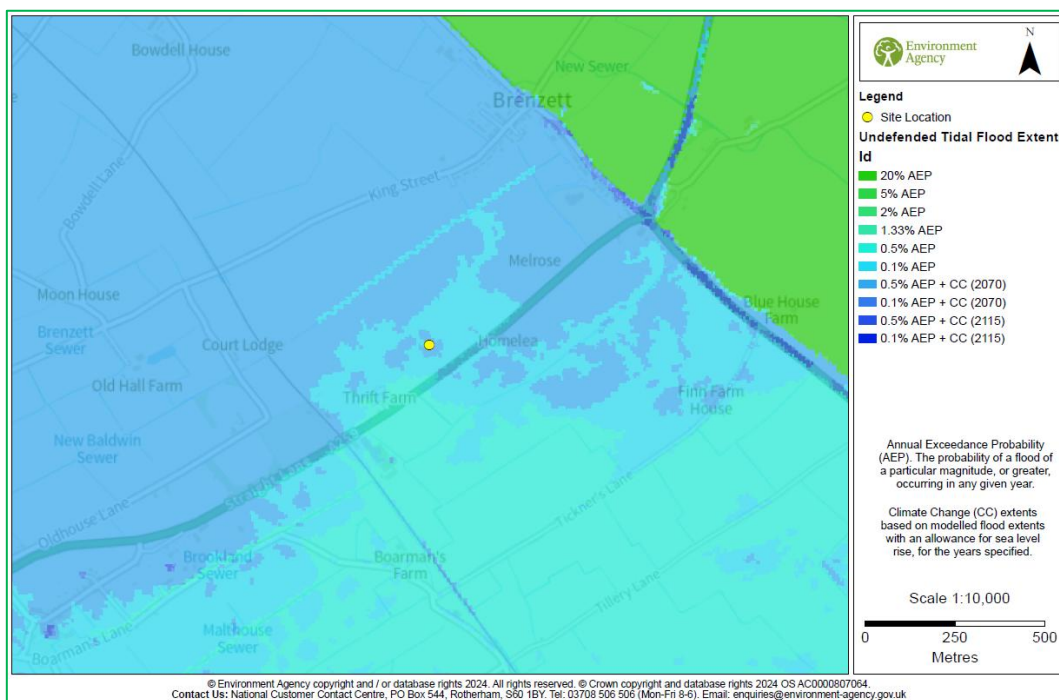


Figure 5 - Environment Agency Undefended Modelled Flood Outlines

The Folkestone and Hythe District Council SFRA has undertaken breach and wave overtopping modelling for the 1 in 200 year tidal event for the following individual time epochs:

- Current day - 2015
- 60 years of climate change (2075)
- 100 years of climate change (2115)

Each scenario tested uses the appropriate increase in wave height and water level values which are commensurate with the associated design horizons. The Site would not be inundated with floodwater due to a breach and/or overtopping of the flood defences during the 1 in 200 year in 2115. The Site would be flood free during the 1 in 200 year in 2115 event due to a breach and/or overtopping of the flood defences.

The associated flood risk with the Site is that of a residual nature, i.e. the flood risk as a result of a failure or breach in the flood defences. The mechanism for tidal flooding is generally prolonged episodes of high sea levels, which affords good time for flood warnings to be issued. The likelihood of a rapid water level rise and possible rapid inundation of urban areas posing a risk to life is considered to be minimal with a forewarning of two (2) days of a pending flood event.

The Site is located within a low risk area where the onset of flooding is very gradual (many hours) as per Flood Risk Assessment Guidance for New Development Phase 2, R&D Technical Report FD2320/TR2. Given the scale and nature of the Proposed Development and the size and location of the tidal flooding sources it has been concluded that the risk of tidal flooding is considered to be of **medium significance**. The risk from tidal sources will be further managed and mitigated by using a number of property level protection measures to manage and reduce the overall flood risk at the Site (see Section 5.0).

3.13 Groundwater Flooding

Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

Groundwater flooding tends to occur sporadically in both location and time. When groundwater flooding does occur, it tends to mostly affect low-lying areas, below surface infrastructure and buildings (for example, tunnels, basements and car parks) underlain by permeable rocks (aquifers). Site ground conditions suggest a low potential for groundwater flooding. Environment Agency data shows that groundwater flooding is unlikely in this area. The risk of flooding from groundwater flooding is considered to be **not significant**.

3.14 Surface Water (Pluvial) Flooding

The Site is not situated near to large areas of poor permeability or areas with the geology and/or topography which may result in surface water flooding. The Site surroundings are relatively flat and there are no large catchments that would tend to generate surface water runoff towards the Site. Surface water flow flooding tends to occur sporadically in both location and time such surface water flows would tend to be confined to the streets around the development.

The Environment Agency Surface Water flood map shows that the Site has a low risk of surface water flooding with a chance of flooding of 1 in 1000 (0.1%) years, as shown in Figures 6 to 8. The areas shown to be at risk of surface water flooding are associated with low spots on the Site and a very small proportion of the Site may be inundated with floodwater during the 1 in 1000 year event.

Therefore, the risk of flooding from surface water flooding is considered to be of **low significance**. The risk from this source will be further mitigated by using a number of property level protection measures to manage and reduce the overall flood risk at the Site (see Section 5.0).



Figure 6 - Environment Agency Surface Water Flood Map: 1 in 30 Year Event

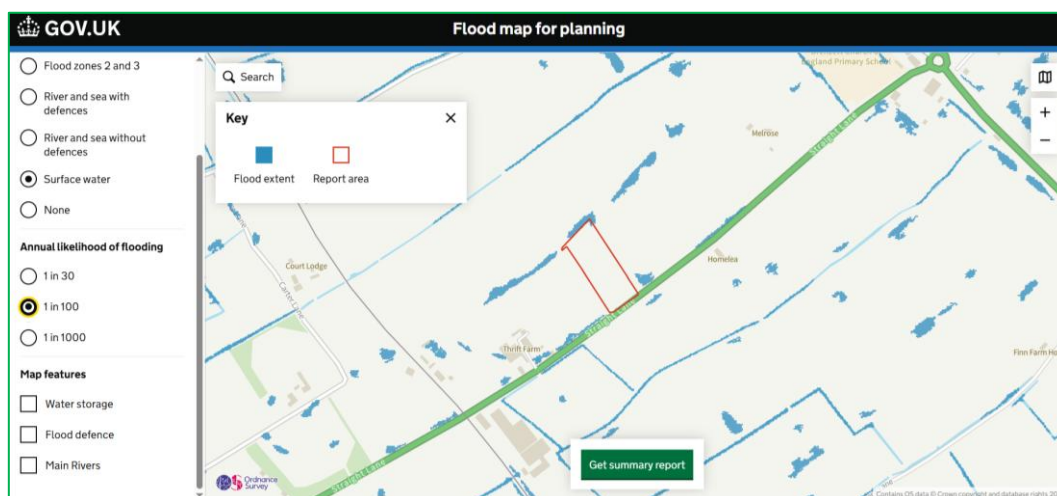


Figure 7 - Environment Agency Surface Water Flood Map: 1 in 100 Year Event

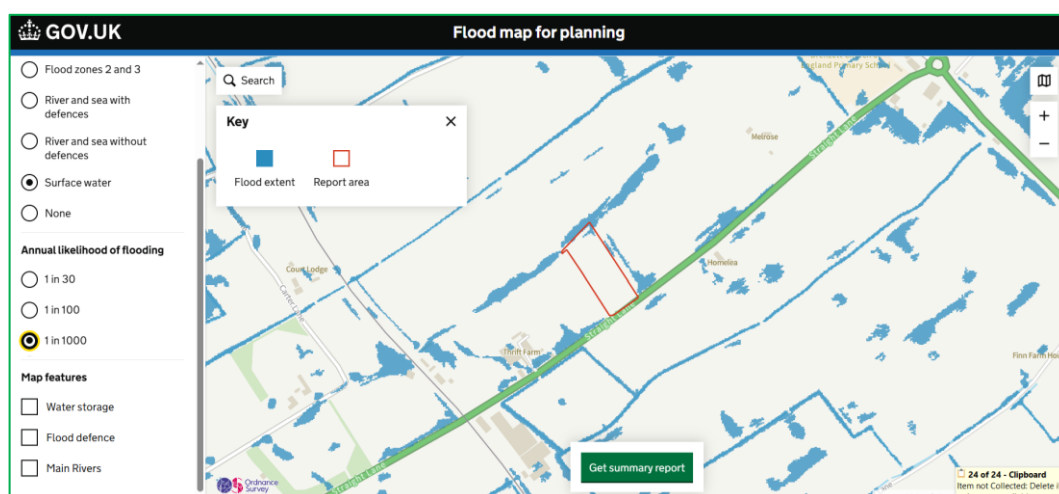


Figure 8 - Environment Agency Surface Water Flood Map: 1 in 1000 Year Event

3.15 Sewer Flooding

Sewer flooding occurs when urban drainage networks become overwhelmed and maximum capacity is reached. This can occur if there is a blockage in the network causing water to back up behind it or if the sheer volume of water draining into the system is too great to be handled. Sewer flooding tends to occur sporadically in both location and time such flood flows would tend to be confined to the streets around the development.

There are existing sewers located within the vicinity of the Site and these will inevitably have a limited capacity so in extreme conditions there would be surcharges, which may in turn cause flooding. Flood flows could also be generated by burst water mains, but these would tend to be of a restricted and much lower volume than weather generated events and so can be discounted for the purposes of this assessment.

Given the design parameters normally used for drainage design in recent times and allowing for some deterioration in the performance of the installed systems, which are likely to have been in place for many years, an appropriate flood risk probability from this source could be assumed to have a return period in the order of 1 in 10 to 1 in 20 years. The provision of adequate level difference between the ground floors and adjacent ground level would reduce

the annual probability of damage to property from this source to 1 in 100 years or less. Therefore, the risk of flooding from sewer flooding is considered to be **not significant**.

3.16 Flooding from Artificial Drainage Systems/Infrastructure Failure

There are no other nearby artificial water bodies, reservoirs, water channels and artificial drainage systems that could be considered a flood risk to the Site. The Site is not at risk of flooding from reservoir failure. The risk of flooding from artificial drainage systems/infrastructure failure is considered to be **not significant**.

3.17 Impact of the Proposed Development on Flood Risk

No land raising will occur within the Site therefore, the Proposed Development will not impede the movement of floodwater across the Site. This will ensure no detriment to the flood storage capacity of the Site.

The overall direction of the movement of water will be maintained within the developed Site and surrounding area. The conveyance routes (flow paths) will not be blocked or obstructed. There will be no increase in the floodwater levels due to the Proposed Development. There will be no loss in flood storage capacity and no change in the on-site and off-site flood risk.

3.18 Summary of Site Specific Flood Risk

A summary of the sources of flooding and a review of the risk posed by each source at the Site is shown in Table 6.

Table 7 - Risk Posed by Flooding Sources

Sources of Flooding	Potential Flood Risk	Potential Source	Probability/Significance
Fluvial Flooding	Yes	Small Watercourses/Drainage Ditches	None
Tidal Flooding	Yes	English Channel	Medium
Groundwater Flooding	No	None Reported	None
Surface Water Flooding	Yes	Low Spots	Low
Sewer Flooding	No	None Reported	None
Flooding from Artificial Drainage Systems/Infrastructure Failure	No	None Reported	None

The primary, but unlikely, flood risk to the Site is posed by tidal flooding. The Site is located within Flood Zone 2 and therefore has a 'medium probability' of flooding. Flood Zone 2 has between a 1 in 200 and 1 in 1000 annual probability of tidal flooding (0.5%-0.1%) in any year. However, the Site has not history of flooding.

The existing and proposed use is classified as 'less vulnerable'. The Proposed Development will not change the vulnerability of the Site to flooding or lead to a new 'more vulnerable' use in the floodplain. 'Less vulnerable' uses are appropriate within Flood Zones 2 after the completion of a satisfactory FRA.

The Environment Agency has confirmed that although there are no formal flood defences in the immediate vicinity of the Site, the Site currently benefits from the Lydd Ranges Scheme which has a design life of 25 years from 2020 with a 1 in 200 year (0.5% AEP) SoP.

Actual Defended Risk

The Site will not be inundated with floodwater for all events up to and including the defended 1 in 1000 year in 2115 event. The Site will be flood free during the defended 1 in 1000 year in 2115 event, as shown in Figure 4. Therefore, the Site will be flood free during the design event which is the 1 in 200 year in 2100 event. The flood risk posed to the Site can therefore, be deemed a residual risk.

Residual Undefended Risk

The flood defences can only protect up to a point, they may malfunction, can be breached and have a finite structure life. Therefore, there is a residual risk of tidal flooding. If the flood defences were not there, the area would be flooded. However, an area of land may benefit from the presence of flood defences even if the flood defences are overtopped, the presence of the flood defences means that the floodwater does not extend as far as it would if the flood defences were not there.

The Site will not be inundated with floodwater for all events up to and including the undefended 1 in 200 year event. The Site will be flood free during the undefended 1 in 200 year event.

It is only when climate change is taken into account of flood events of a greater magnitude were to occur that the Site may be inundated with floodwater. During the 1 in 100 year event the Site may be inundated with floodwater to a maximum depth of 0.24m in the very north west of the Site however, the majority of the Site would not be inundated with floodwater during this flood event. The majority of the Site would be flood free during the 1 in 1000 year event. During the 1 in 200 year in 2115 event flood depths of over 1.50m may be experienced on the Site.

The Folkestone and Hythe District Council SFRA has undertaken breach and wave overtopping modelling for the 1 in 200 year tidal event for the following individual time epochs. The Site would not be inundated with floodwater due to a breach and/or overtopping of the flood defences during the 1 in 200 year in 2115. The Site would be flood free during the 1 in 200 year in 2115 event due to a breach and/or overtopping of the flood defences.

The associated flood risk with the Site is that of a residual nature, i.e. the flood risk as a result of a failure or breach in the flood defences. The mechanism for tidal flooding is generally prolonged episodes of high sea levels, which affords good time for flood warnings to be issued. The likelihood of a rapid water level rise and possible rapid inundation of urban areas posing a risk to life is considered to be minimal with a forewarning of two (2) days of a pending flood event.

The Site is located within a low risk area where the onset of flooding is very gradual (many hours) as per Flood Risk Assessment Guidance for New Development Phase 2, R&D Technical Report FD2320/TR2. Given the scale and nature of the Proposed Development and the size and location of the tidal flooding sources it has been concluded that the risk of tidal flooding is considered to be of **medium significance**. A secondary flooding source has been identified which may pose a **low significant** risk to the Site. This is:

- Surface Water Flooding

The risk from all sources will be further mitigated by using a number of property level protection measures to manage and reduce the overall flood risk at the Site (see Section 5.0). The application is for a new, suitable flood-resilient design. The exposure of people and property will be reduced and minimised compared to existing Site conditions. The chance of flooding each year is low each year. This takes into account the property level protection measures.

No land raising will occur within the Site therefore, the Proposed Development will not impede the movement of floodwater across the Site. This will ensure no detriment to the flood storage capacity of the Site.

The overall direction of the movement of water will be maintained within the developed Site and surrounding area. The conveyance routes (flow paths) will not be blocked or obstructed. There will be no increase in the floodwater levels due to the Proposed Development. There will be no loss in flood storage capacity and no change in the on-site and off-site flood risk.

4.0 SURFACE WATER DRAINAGE

4.1 Surface Water Management Overview

It is recognised that consideration of flood issues should not be confined to the floodplain. The alteration of natural surface water flow patterns through developments can lead to problems elsewhere in the catchment, particularly flooding downstream. For example, replacing vegetated areas with roofs, roads and other paved areas can increase both the total and the peak flow of surface water runoff from the development Site. Changes of land use on previously developed land can also have significant downstream impacts where the existing drainage system may not have sufficient capacity for the additional drainage.

An assessment of the surface water runoff rates has been undertaken, in order to determine the surface water options and attenuation requirements for the Site. The assessment considers the impact of the development compared to current conditions. Therefore, the surface water attenuation requirement for the developed Site can be determined and reviewed against existing arrangements.

The surface water drainage arrangements for any development site should be such that the volumes and peak flow rates of surface water leaving a developed site are no greater than the rates prior to the Proposed Development unless specific off-site arrangements are made and result in the same net effect.

4.2 Climate Change

Projections of future climate change, in the UK, indicate more frequent, short-duration, high intensity rainfall and more frequent periods of long duration rainfall. Recommended precautionary sensitivity ranges for peak rainfall intensities and peak river flows are outlined in the flood risk assessments: climate change allowances guidance⁷. The recommended precautionary sensitivity range for peak rainfall intensity are summarised in Table 8.

Table 8 - Peak Rainfall Intensity Allowance

River Catchment	Return Period (yrs)	Allowance Category	2050s	2070s
Rother Management Catchment	30	Upper end	+40%	+40%
		Central	+20%	+20%
	100	Upper end	+45%	+45%
		Central	+20%	+20%

4.3 Proposed Outline SuDS Statement

The objective of this Outline SuDS Statement is to ensure that a sustainable drainage solution can be achieved which reduces the peak discharge rate to manage and reduce the flood risk posed by the surface water runoff from the Site and takes into account the following principles:

- No increase in the volume or runoff rate of surface water runoff from the Site.
- No increase in flooding to people or property off-site as a result of the development.
- No surface water flooding of the Site.

⁷ <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances#high-allowances>

- The proposals take into account a 45% increase in rainfall intensity due to climate change during the next 100 years which is the lifetime of the development.

In line with adopting a 'management train' it is recommended that water is managed as close to source as possible. This will reduce the size and cost of infrastructure further downstream and also shares the maintenance burden more equitably. It is therefore recommended that the Site provides its own attenuation and could take the form of:

- Proposed Development will be drained by permeable surfaces.
- For larger events in other areas such landscaped areas, provided that it will not cause damage or prevent access.

The surface water runoff from the developed Site will be no different to the pre-and post-application. There will be no increase in surface water runoff or exacerbation of off-site risk as a result of the development.

For all developments, both the Building Regulations and NPPF promote a hierarchical approach to surface water management. This approach has been adopted within this Outline SuDS Statement and infiltration devices will be used where possible,. Consequently, all areas drained would be designed to accommodate a 100 year (+45%) event.

The remainder of the Site that is not formally drained, i.e. landscaped areas, will be permeable (grass). The majority of rainwater falling on these areas will soak into the ground. Surface water runoff would be directed to the drainage system through drainage gullies located around the perimeter of the building and through contouring of the hardstanding areas.

Flooding will not occur on any part of the Site during the 1 in 30 year event, no flooding will occur within any part of the building during the 1 in 100 year (+45%) event, all areas drained have been designed to accommodate the 1 in 100 year (+45%) event.

5.0 RISK MANAGEMENT

5.1 Introduction

The flood risk at this location is considered suitable for 'less vulnerable' developments within the NPPF. In this flood zone, developers and local authorities should seek opportunities to reduce the overall level of flood risk in the area through the layout and form of the development and the use of flood mitigation measures.

The flooding sources will be mitigated on the Site by using a number of techniques, and mitigation strategies to manage and reduce the overall flood risk at the Site. This will ensure the development will be safe and there is:

- Minimal risk to life;
- Minimal disruption to people living and working in the area;
- Minimal potential damage to property;
- Minimal impact of the Proposed Development on flood risk generally; and;
- Minimal disruption to natural heritage.

The flood risk at the Site will be reduced by mitigation measures; these are discussed in more detail below.

5.2 Finished Floor Levels

The finished floor levels will be no lower than the existing ground levels. It is recognised however that owing to limited headroom constraints, massing, planning policy and Building Regulations it is considered impractical to raise the finished floor levels further. Therefore, in order to mitigate against this, it is recommended that the occupants of the proposed stables sign up to receive flood warnings from the Environment Agency and implement a Flood Plan to a safe area away from the building during times of flood.

A combination of resistance (proofing) and resilience measures will be included to provide further protection. This is discussed below.

5.3 Flood Resilience and Resistance

The development of the layout should always consider that the Site is potentially at risk from an extreme event and as such the implementation of flood resilience and resistance methods should be assessed.

To make the stables more resistant to seepage the following measures will be incorporated. Sealant will be used around external doors and windows. All external doors and windows will be constructed from durable materials and the walls of the building will be thick.

The stables will be constructed with a concrete floor which will be resistant and resilient to flooding. The stables will be easily cleaned and put back into use after a flood. The applicant is aware of the potential flood risk at the Site and will arrange the internal storage with this in mind. Therefore, using floodable structures is not considered to pose a flood risk to the development.

5.4 Flood Warning and Evacuation

The Site is located in a flood risk area therefore; the Site will participate in the Environment Agency flood warning telephone service. The Site will register contact details with the Environment Agency's Flood Warnings Service (Floodline 0845 988 1188) in order to receive Flood Warnings. The Environment Agency operate a free flood warning service providing alerts by phone, text or email when flooding is anticipated providing an opportunity for home owners to take necessary precautions, giving enough time for the building to be safely evacuated and mitigation measures to be put in place.

All occupants/visitors of the Site will be made aware of the Environment Agency Floodline telephone number (Call Floodline on 0345 988 1188 or 0845 988 1188 to get more information) and the three Flood Warning Codes and their meaning. The owner of the Site will carry out the role of Flood Warden for the Site and ensure they have an understanding of the flood mechanisms of the Site and will ensure that the safety of the occupants and visitors will not be compromised.

The Environment Agency uses three Flood Warnings Codes. They can be issued in any order, usually ending with an 'all clear'. They are issued by the Environment Agency through their website and Floodline Warning Service. The flood warning will be passed onto the occupier/visitors of the Site verbally, by telephone and/or in person. It will be ensured that everyone receives the flood warnings when required.

5.5 Flood Plan

A Flood Plan outlining the precautions and actions you should take when a flood event is anticipated to help reduce the impact and damage flooding may cause will be developed. Sensible precautions would include raising electrical items, irreplaceable items and sentimental items off the ground or where possible moving them to a higher floor, rolling up carpets and rugs and turning off utilities. In addition, consider what actions you would take should the property need to be evacuated including access and egress routes and preparing a flood kit in advance containing warm clothing, medication, a torch, food and wellingtons.

The Flood Plan is a 'living' document and therefore should be periodically reviewed and updated to provide advice and guidance to occupants in the event of an extreme flood. The Flood Plan will therefore reduce the vulnerability of the occupants to flooding and makes them aware of the mechanisms of flooding at the Site.

Residual Risk

If flooding starts to affect the Site without any pre-warning i.e. in real time (e.g. through a failure of the flood warning delivery) the following actions will be taken:

- Occupants and visitors should consider evacuating the Site.
- If flood levels continue to rise, occupants and visitors are advised to evacuate before safe access is lost. Occupants and visitors should monitor the flood progression and evacuate.

The Flood Warden will monitor flood levels and keep occupants and visitors informed and will decide whether to initiate the Flood Plan. If required a 'safe haven' can also be maintained and may be required in very extreme events if a flood warning has not been received.

5.6 Safe Access and Egress Routes

The NPPF requires that, where required, safe access and escape is available to/from new developments in flood risk areas. Access routes should be such that occupants can safely access and exit their houses in design flood conditions. These routes must also provide the emergency services with access to the development during a flood event and enable flood defence authorities to carry out any necessary duties during the period of flood.

A safe access and egress route, including emergency access can be maintained for vehicles and/or by foot via the access road to the Site. The Site is at such a ground level that it would only flood in the most extreme flood event. Likewise, the access and egress route will remain dry in all but these most extreme scenarios. A safe access and egress route with minimum water depths would be possible for many hours if not days. This would provide more than an adequate amount of time for the Site to be evacuated, if required.

The actual risk of flooding caused by overtopping during a flood event will be reduced compared to the extent of flooding shown on the Environment Agency's Flood Zones. The Site is located within a low risk area where the onset of flooding is very gradual (many hours) as per Flood Risk Assessment Guidance for New Development Phase 2, R&D Technical Report FD2320/TR2.

Facilities such as community centres, shops etc. are located within the vicinity of the Site. There may also be large areas than those shown in Figure 2 that are flood free located nearer and within the vicinity of the Site. In the event of a Flood Warning, vital belongings, including waterproof clothing, necessary medication and essentials for infants and children will be collected. It should be ensured that all occupiers and visitors to the Site are accounted for, and then exit the Site. People should make their way to areas outside of the flood zone. Therefore, safe access and egress can be maintained in accordance with the NPPF and Environment Agency guidance.

5.6 Flood Warning Codes / Flood Evacuation Procedures

In order for the following evacuation procedures to be effective:

- The Site will participate in the Environment Agency flood warning telephone service. The Site will register contact details with the Environment Agency' Flood Warnings Service (Floodline 0345 988 1188) in order to receive Flood Warnings/Alerts.
- The flood warning will be passed onto the visitors of the Site verbally, by telephone and/or in person. It will be ensured that everyone receives the flood warnings when required.

Flood Alert



'Flooding of low-lying land and roads is expected. Be aware, be prepared, watch out!'

The Environment Agency will issue a Flood Alert status when flooding is possible, based upon weather and river/sea conditions. Be prepared to act on your flood plan. At this stage occupants and visitors should make themselves aware of the Flood Plan and evacuation

routes. Prepare a flood kit of essential items. Monitor local water levels and the flood forecast.

Flood Warning



'Flooding of homes and businesses is expected. Act now!'

The Flood Warning alert will be issued when water levels are rising, and further rain is expected. The Site will be evacuated. Move family, pets and valuables to a safe place.

Safe access and egress, including emergency access can be maintained for vehicles and/or by foot. Water, electricity and gas supplies should be located and switched off before evacuating. The Environment Agency Floodline on 0345 988 1188 to get more information should be contacted to get more information, periodically and listen to and watch for weather and flood warnings on local radio and television stations.

Severe Flood Warning



'Severe Flooding is expected. There is extreme danger life and property. Act now!'

If the Site has not already been evacuated, it will be evacuated immediately. Co-operate with the emergency services and call 999 if immediately in danger. Safe access and egress, including emergency access can be maintained for vehicles and/or by foot.

Warning No Longer in Force

'Flood Watches or Flood Warnings are no longer in force for this area'.

Occupants and visitors should contact the Council to check that it is safe to return to the Site. Please be careful water may be around for several days. If there is any doubt that appliances may be water damaged, they must be checked before switching the power or gas back on. Contact your insurance company as soon as possible to get their approval before arranging any clean-up or repairs.

5.7 Residual Risk

The mitigation measures detailed above show that the flood risk can be effectively managed and therefore the consequences of flooding are acceptable. The Site is unlikely to flood except in extreme conditions. This takes into account the property level protection measures.

6.0 SUMMARY AND CONCLUSIONS

6.1 Introduction

This report presents a FRA in accordance with the NPPF for the Proposed Development on Land North of Straight Lane, New Romney, Kent, TN29 9QT.

This FRA identifies and assesses the risks of all forms of flooding to and from the development and demonstrates how these flood risks will be managed so that the development remains safe throughout the lifetime, taking climate change into account.

6.2 Flood Risk

The primary, but unlikely, flood risk to the Site is posed by tidal flooding. The Site is located within Flood Zone 2 and therefore has a 'medium probability' of flooding. Flood Zone 2 has between a 1 in 200 and 1 in 1000 annual probability of tidal flooding (0.5%-0.1%) in any year. However, the Site has not history of flooding.

The existing and proposed use is classified as 'less vulnerable'. The Proposed Development will not change the vulnerability of the Site to flooding or lead to a new 'more vulnerable' use in the floodplain. 'Less vulnerable' uses are appropriate within Flood Zones 2 after the completion of a satisfactory FRA.

The Environment Agency has confirmed that although there are no formal flood defences in the immediate vicinity of the Site, the Site currently benefits from the Lydd Ranges Scheme which has a design life of 25 years from 2020 with a 1 in 200 year (0.5% AEP) SoP.

Actual Defended Risk

The Site will not be inundated with floodwater for all events up to and including the defended 1 in 1000 year in 2115 event. The Site will be flood free during the defended 1 in 1000 year in 2115 event, as shown in Figure 4. Therefore, the Site will be flood free during the design event which is the 1 in 200 year in 2100 event. The flood risk posed to the Site can therefore, be deemed a residual risk.

Residual Undefended Risk

The flood defences can only protect up to a point, they may malfunction, can be breached and have a finite structure life. Therefore, there is a residual risk of tidal flooding. If the flood defences were not there, the area would be flooded. However, an area of land may benefit from the presence of flood defences even if the flood defences are overtopped, the presence of the flood defences means that the floodwater does not extend as far as it would if the flood defences were not there.

The Site will not be inundated with floodwater for all events up to and including the undefended 1 in 200 year event. The Site will be flood free during the undefended 1 in 200 year event.

It is only when climate change is taken into account of flood events of a greater magnitude were to occur that the Site may be inundated with floodwater. During the 1 in 100 year event the Site may be inundated with floodwater to a maximum depth of 0.24m in the very north west of the Site however, the majority of the Site would not be inundated with floodwater during this flood vent. The majority of the Site would be flood free during the 1 in 1000 year

event. During the 1 in 200 year in 2115 event flood depths of over 1.50m may be experienced on the Site.

The Folkestone and Hythe District Council SFRA has undertaken breach and wave overtopping modelling for the 1 in 200 year tidal event for the following individual time epochs. The Site would not be inundated with floodwater due to a breach and/or overtopping of the flood defences during the 1 in 200 year in 2115. The Site would be flood free during the 1 in 200 year in 2115 event due to a breach and/or overtopping of the flood defences.

The associated flood risk with the Site is that of a residual nature, i.e. the flood risk as a result of a failure or breach in the flood defences. The mechanism for tidal flooding is generally prolonged episodes of high sea levels, which affords good time for flood warnings to be issued. The likelihood of a rapid water level rise and possible rapid inundation of urban areas posing a risk to life is considered to be minimal with a forewarning of two (2) days of a pending flood event.

The Site is located within a low risk area where the onset of flooding is very gradual (many hours) as per Flood Risk Assessment Guidance for New Development Phase 2, R&D Technical Report FD2320/TR2. Given the scale and nature of the Proposed Development and the size and location of the tidal flooding sources it has been concluded that the risk of tidal flooding is considered to be of **medium significance**. A secondary flooding source has been identified which may pose a **low significant** risk to the Site. This is:

- Surface Water Flooding

The risk from all sources will be further mitigated by using a number of property level protection measures to manage and reduce the overall flood risk at the Site (see Section 5.0). The application is for a new, suitable flood-resilient design. The exposure of people and property will be reduced and minimised compared to existing Site conditions. The chance of flooding each year is low each year. This takes into account the property level protection measures.

No land raising will occur within the Site therefore, the Proposed Development will not impede the movement of floodwater across the Site. This will ensure no detriment to the flood storage capacity of the Site.

The overall direction of the movement of water will be maintained within the developed Site and surrounding area. The conveyance routes (flow paths) will not be blocked or obstructed. There will be no increase in the floodwater levels due to the Proposed Development. There will be no loss in flood storage capacity and no change in the on-site and off-site flood risk.

6.3 Surface Water Drainage

The Outline SuDS Statement ensures that a sustainable drainage solution can be achieved which reduces the peak discharge rate to manage and reduce the flood risk posed by the surface water runoff from the Site and takes into account the following principles:

- No increase in the volume or runoff rate of surface water runoff from the Site.
- No increase in flooding to people or property off-site as a result of the development.
- No surface water flooding of the Site.
- The proposals take into account a 45% increase in rainfall intensity due to climate change during the next 100 years which is the lifetime of the development.

In line with adopting a 'management train' it is recommended that water is managed as close to source as possible. This will reduce the size and cost of infrastructure further downstream and also shares the maintenance burden more equitably. It is therefore recommended that the Site provides its own attenuation and could take the form of:

- Proposed Development will be drained by permeable surfaces.
- For larger events in other areas such landscaped areas, provided that it will not cause damage or prevent access.

The surface water runoff from the developed Site will be no different to the pre-and post-application. There will be no increase in surface water runoff or exacerbation of off-site risk as a result of the development.

For all developments, both the Building Regulations and NPPF promote a hierarchical approach to surface water management. This approach has been adopted within this Outline SuDS Statement and infiltration devices will be used where possible,. Consequently, all areas drained would be designed to accommodate a 100 year (+45%) event.

The remainder of the Site that is not formally drained, i.e. landscaped areas, will be permeable (grass). The majority of rainwater falling on these areas will soak into the ground. Surface water runoff would be directed to the drainage system through drainage gullies located around the perimeter of the building and through contouring of the hardstanding areas.

Flooding will not occur on any part of the Site during the 1 in 30 year event, no flooding will occur within any part of the building during the 1 in 100 year (+45%) event, all areas drained have been designed to accommodate the 1 in 100 year (+45%) event.

6.4 Risk Management

The flood risk at the Site will be reduced by mitigation measures, discussed below.

Finished Floor Levels: The finished floor levels will be no lower than the existing ground levels. It is recognised however that owing to limited headroom constraints, massing, planning policy and Building Regulations it is considered impractical to raise the finished floor levels further. Therefore, in order to mitigate against this, it is recommended that the occupants of the proposed stables sign up to receive flood warnings from the Environment Agency and implement a Flood Plan to a safe area away from the building during times of flood.

A combination of resistance (proofing) and resilience measures will be included to provide further protection. This is discussed below.

Flood Resilience and Resistance: To make the stables more resistant to seepage the following measures will be incorporated. Sealant will be used around external doors and windows. All external doors and windows will be constructed from durable materials and the walls of the building will be thick.

The stables will be constructed with a concrete floor which will be resistant and resilient to flooding. The stables will be easily cleaned and put back into use after a flood. The applicant is aware of the potential flood risk at the Site and will arrange the internal storage with this in mind. Therefore, using floodable structures is not considered to pose a flood risk to the development.

Flood Warning and Evacuation: The Site is located in a flood risk area therefore; the Site will participate in the Environment Agency flood warning telephone service. The Site will register contact details with the Environment Agency' Flood Warnings Service (Floodline 0845 988 1188) in order to receive Flood Warnings.

Flood Plan: A Flood Plan outlining the precautions and actions you should take when a flood event is anticipated to help reduce the impact and damage flooding may cause will be developed.

Safe Access and Egress Route: A safe access and egress route, including emergency access can be maintained for vehicles and/or by foot via the access road to the Site. The Site is at such a ground level that it would only flood in the most extreme flood event. Likewise, the access and egress route will remain dry in all but these most extreme scenarios. A safe access and egress route with minimum water depths would be possible for many hours if not days. This would provide more than an adequate amount of time for the Site to be evacuated, if required. People should make their way to areas outside of the flood zone. Therefore, safe access and egress can be maintained in accordance with the NPPF and Environment Agency guidance.

Flood Warning Codes / Flood Evacuation Procedures: The flood evacuation procedures have been developed so that the Site can be safely evacuated. The property will participate in the Environment Agency flood warning telephone service. The Site will register contact details with the Environment Agency' Flood Warnings Service (Floodline 0345 988 1188) in order to receive Flood Warnings. Flood warning will be passed onto the visitors of the Site verbally, by telephone and/or in person. It will be ensured that everyone receives the flood warnings when required.

6.5 Conclusion

In conclusion, the Proposed Development would be expected to remain dry in all but the most extreme conditions. The Site is unlikely to flood except in extreme conditions.

Providing the recommendations made in this FRA are instigated, flood risk from all sources would be minimised, the consequences of flooding are acceptable, and the development would be in accordance with the requirements of the NPPF. This FRA demonstrates that the Proposed Development would be operated with minimal risk from flooding, would not increase flood risk elsewhere and is compliant with the requirements of the NPPF. The development should not therefore be precluded on the grounds of flood risk.



APPENDICES



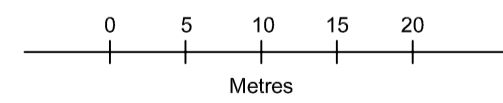
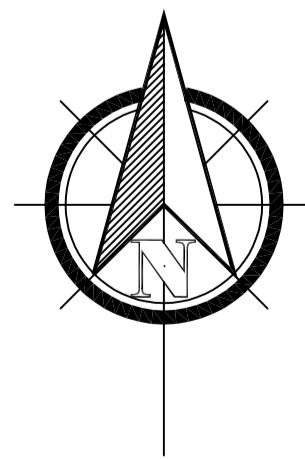
APPENDIX 1 – Existing and Proposed Site Layout

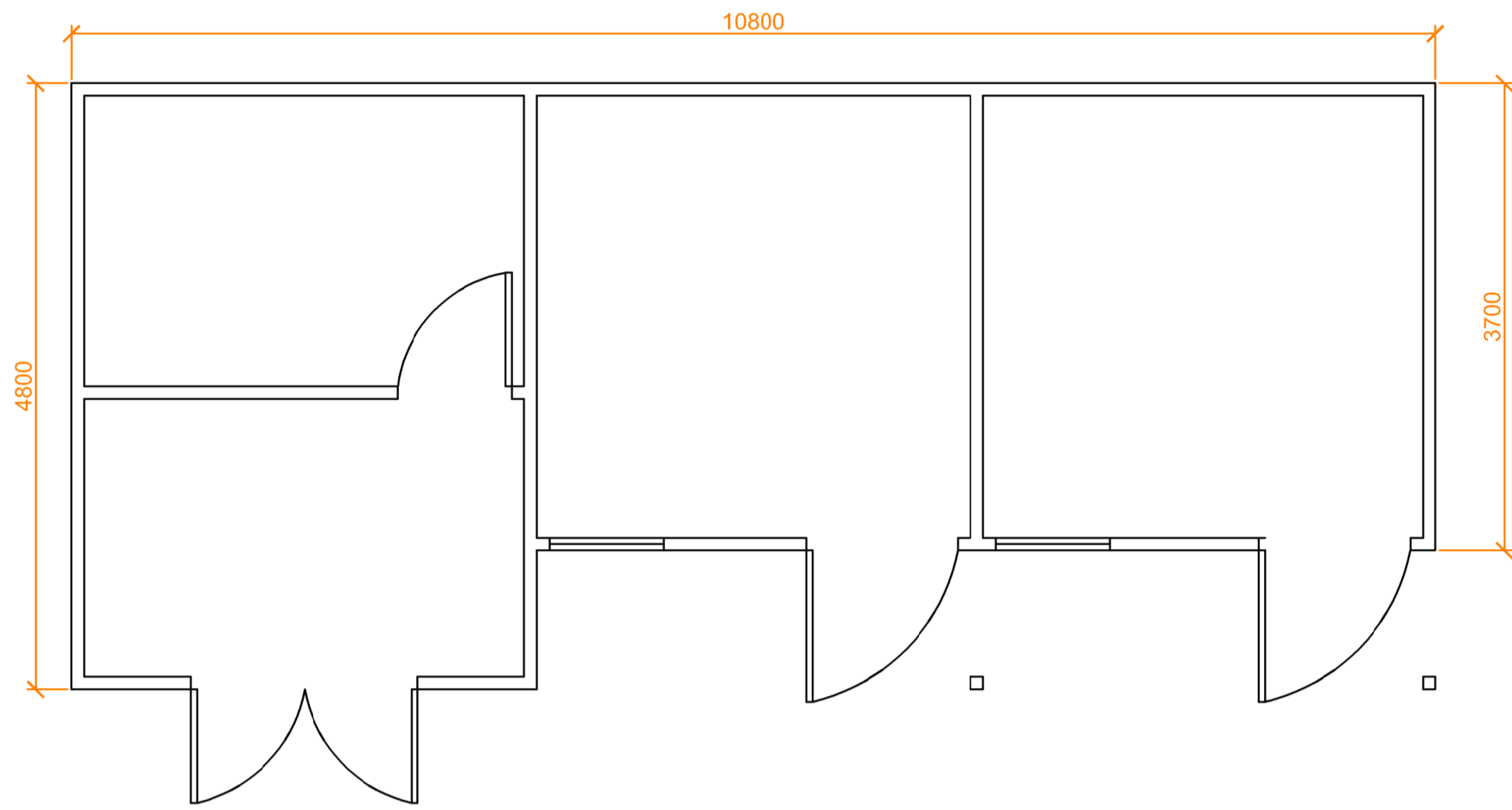


Existing Site Plan @ 1:500

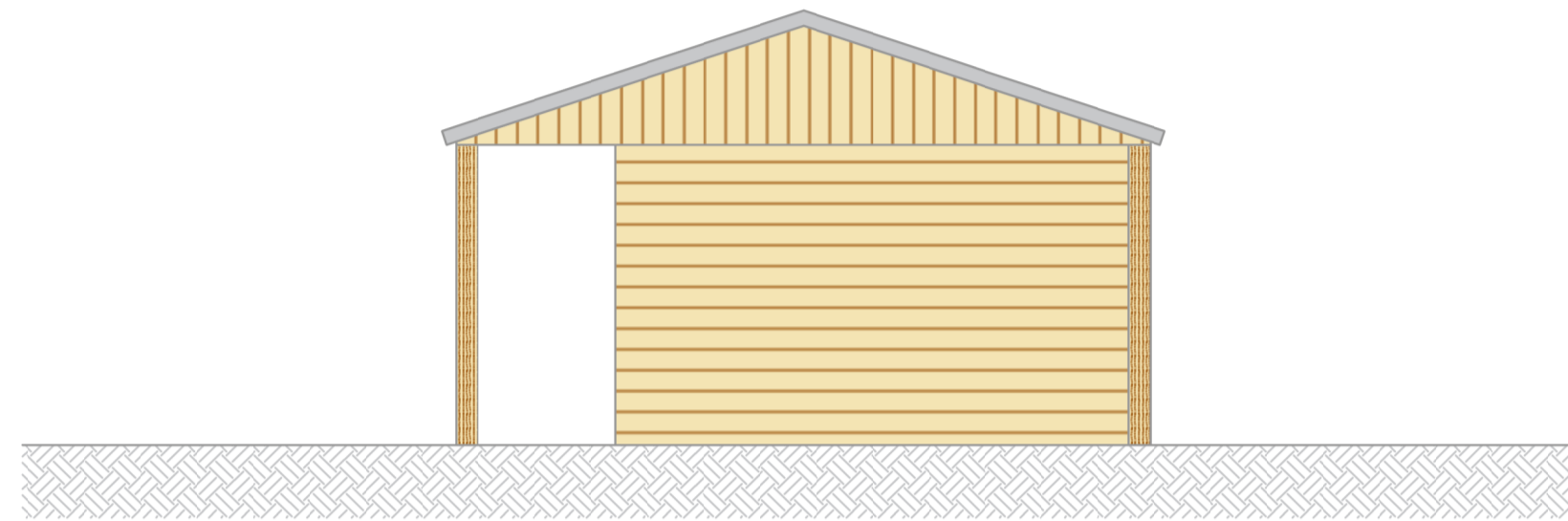


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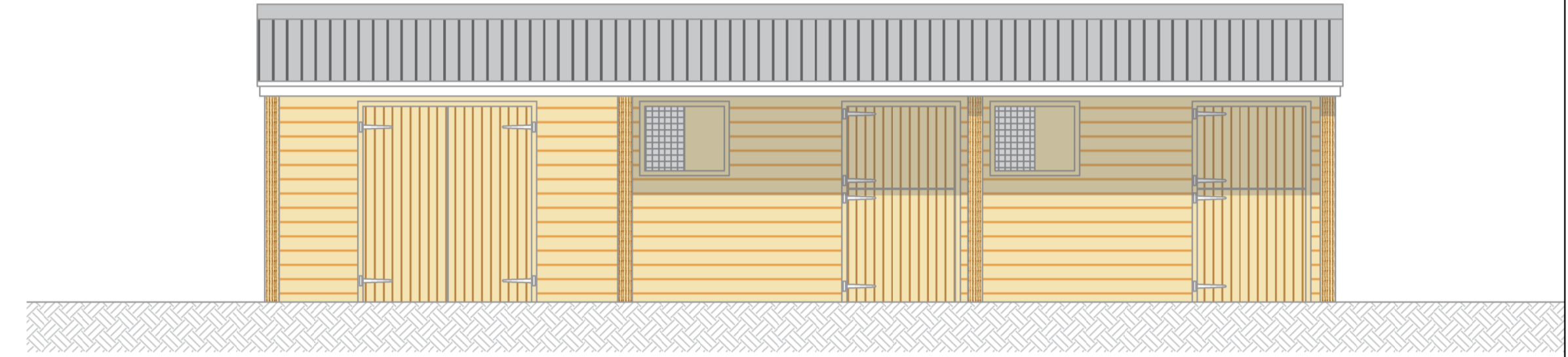




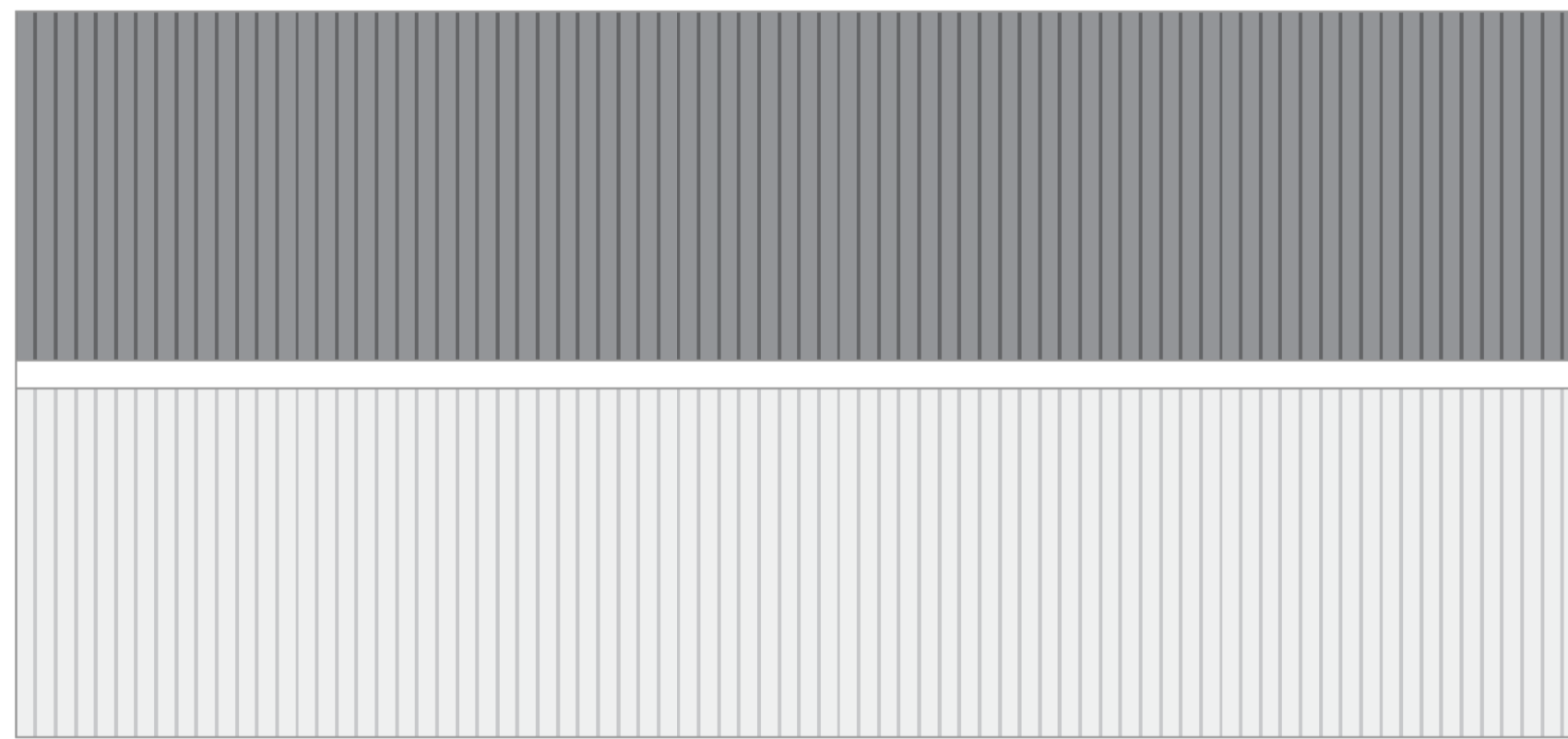
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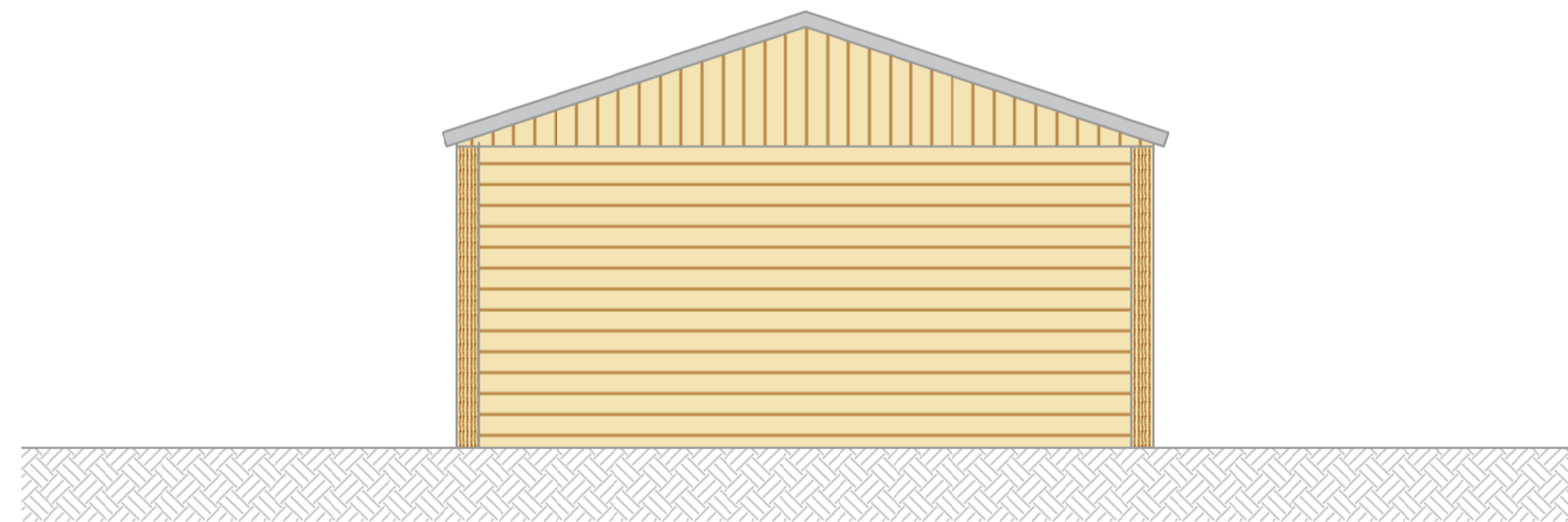
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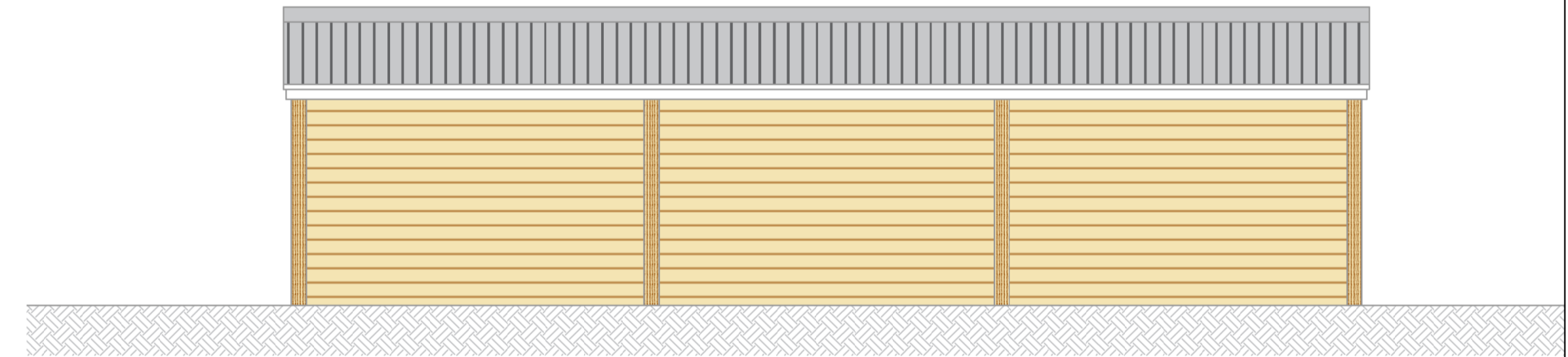
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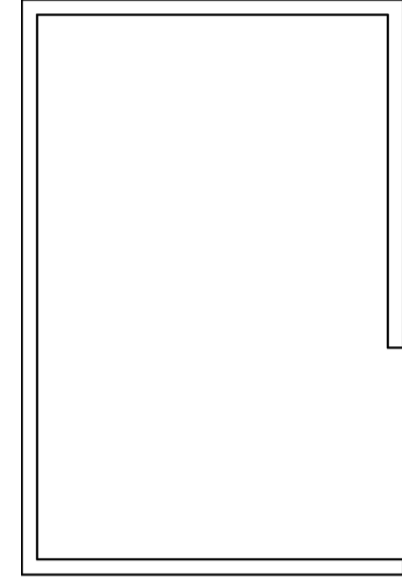
Proposed Roof Plan @ 1:50



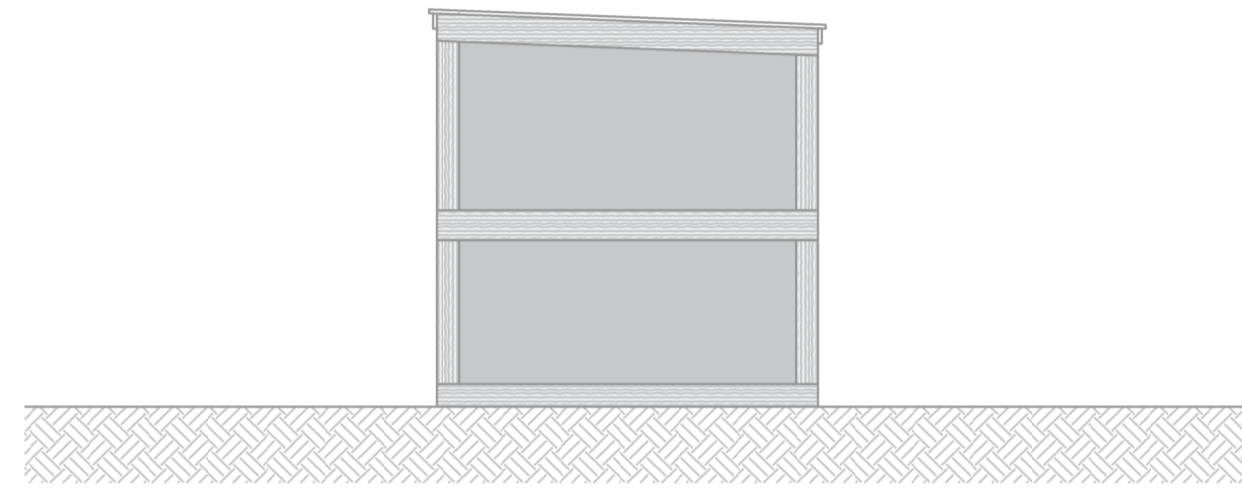
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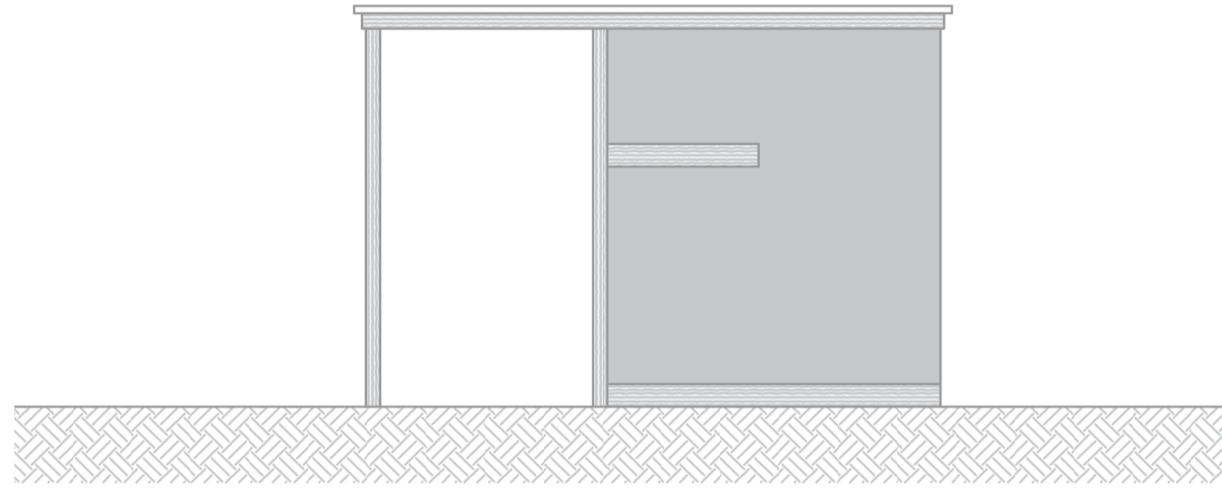
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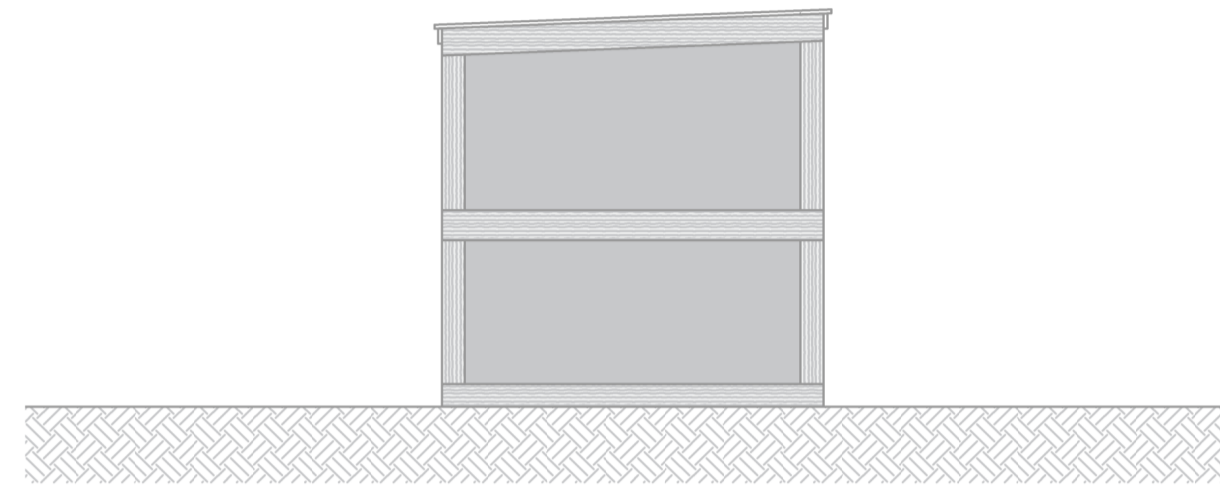
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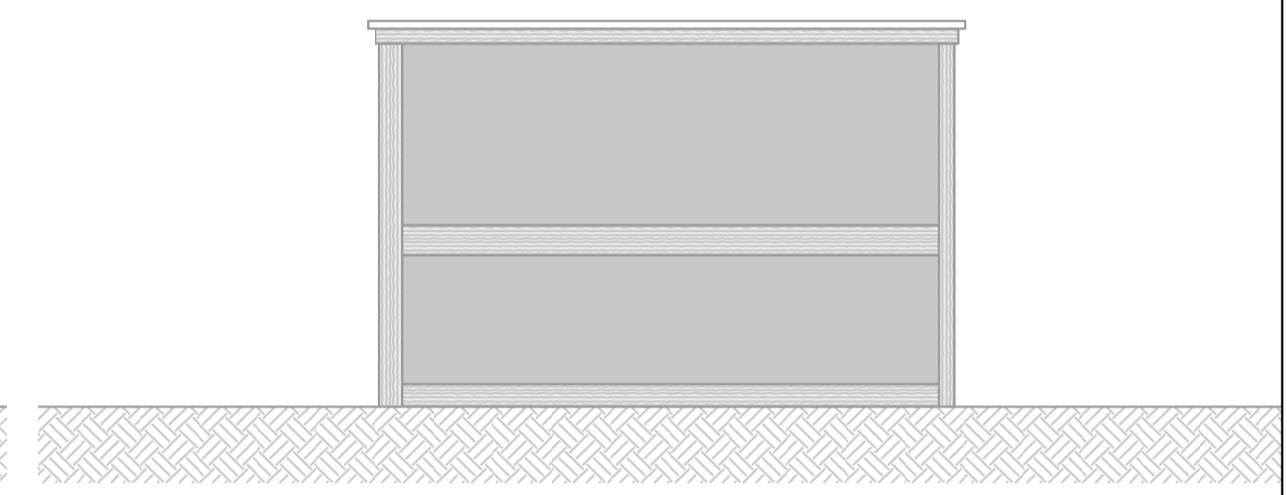
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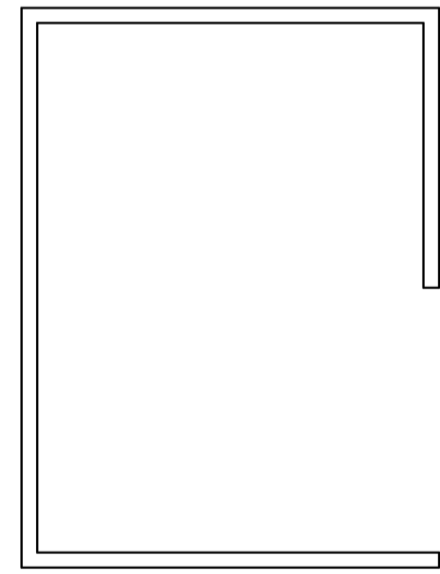
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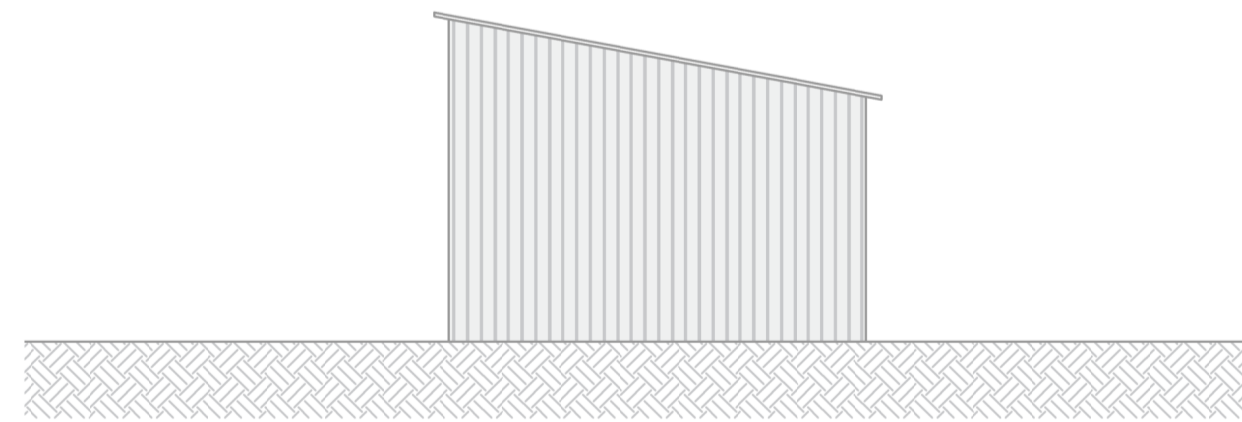
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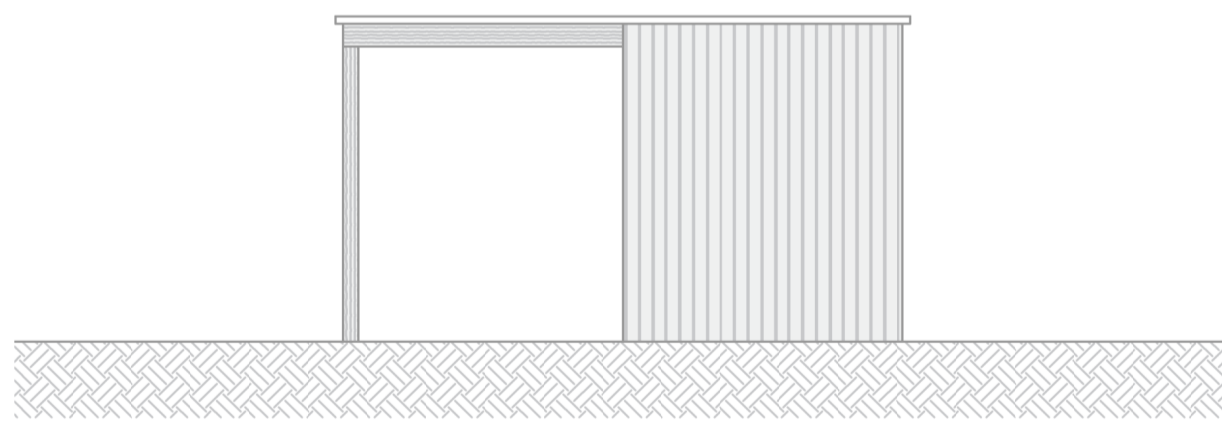
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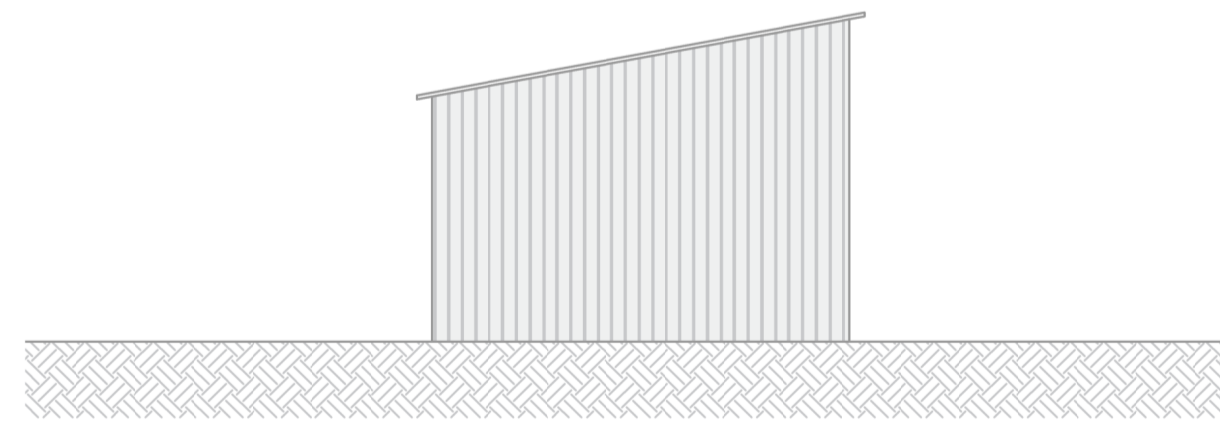
Existing Stables 2 Plans @ 1:50



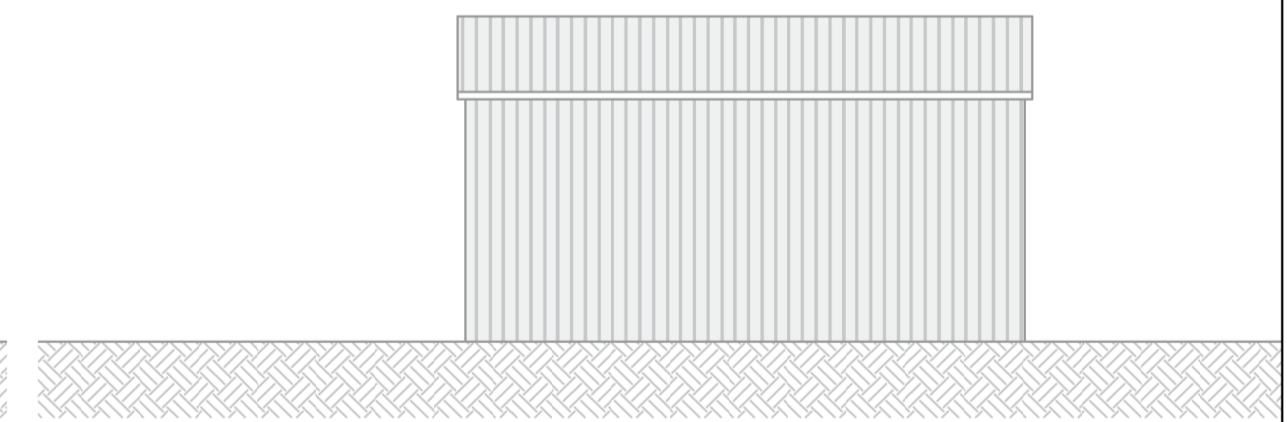
Existing North Elevation @ 1:50



Existing East Elevation @ 1:50



Existing South Elevation @ 1:50



Existing West Elevation @ 1:50



APPENDIX 2 – Environment Agency Data

Product 4 (Detailed Flood Risk) for: TN29 9QT 599991, 126610
Requested by: Ruth Evans
Reference: EIR2025-36515
Date: 04 November 2025

Contents

- Flood Map Confirmation
- Flood Map Extract
- Model Output Data
- Modelled Flood Outlines Map
- Defence Details
- Historic Flood Data
- Site Node Location Map
- Additional Information

The information provided is based on the best data available as of the date of this letter.

You may feel it is appropriate to contact our office at regular intervals, to check whether any amendments/ improvements have been made to the data for this location. Should you contact us again, after a period of time, please quote the above reference in order to help us deal with your query.

Please refer to the [Open Government Licence](#) which explains the permitted use of this information.

Flood Map Confirmation

The Flood Map:

Our Flood Map shows the natural floodplain for areas at risk from fluvial and tidal flooding. The floodplain is specifically mapped ignoring the presence and effects of flood defences. Although flood defences reduce the risk of flooding they cannot completely remove that risk as they may be overtopped or breached during a flood event.

The Flood Map indicates areas with a 1% (0.5% in tidal areas), Annual Exceedance Probability (AEP) - the probability of a flood of a particular magnitude, or greater, occurring in any given year, and a 0.1% AEP of flooding from rivers and/or the sea in any given year. In addition, the map also shows the location of some flood defences and the areas that benefit from them.

The Flood Map is intended to act as a guide to indicate the potential risk of flooding. When producing it we use the best data available to us at the time and also take into account historic flooding and local knowledge. The Flood Map is updated on a quarterly basis to account for any amendments required. These amendments are then displayed on the internet at www.gov.uk/prepare-for-a-flood.

At this Site:

The Flood Map shows that part of this site lies within the outline of Flood Zone 2. This zone comprises land assessed as having between a 1 in 200 (0.5%) and 1 in 1000 (0.1%) annual probability of tidal flooding.

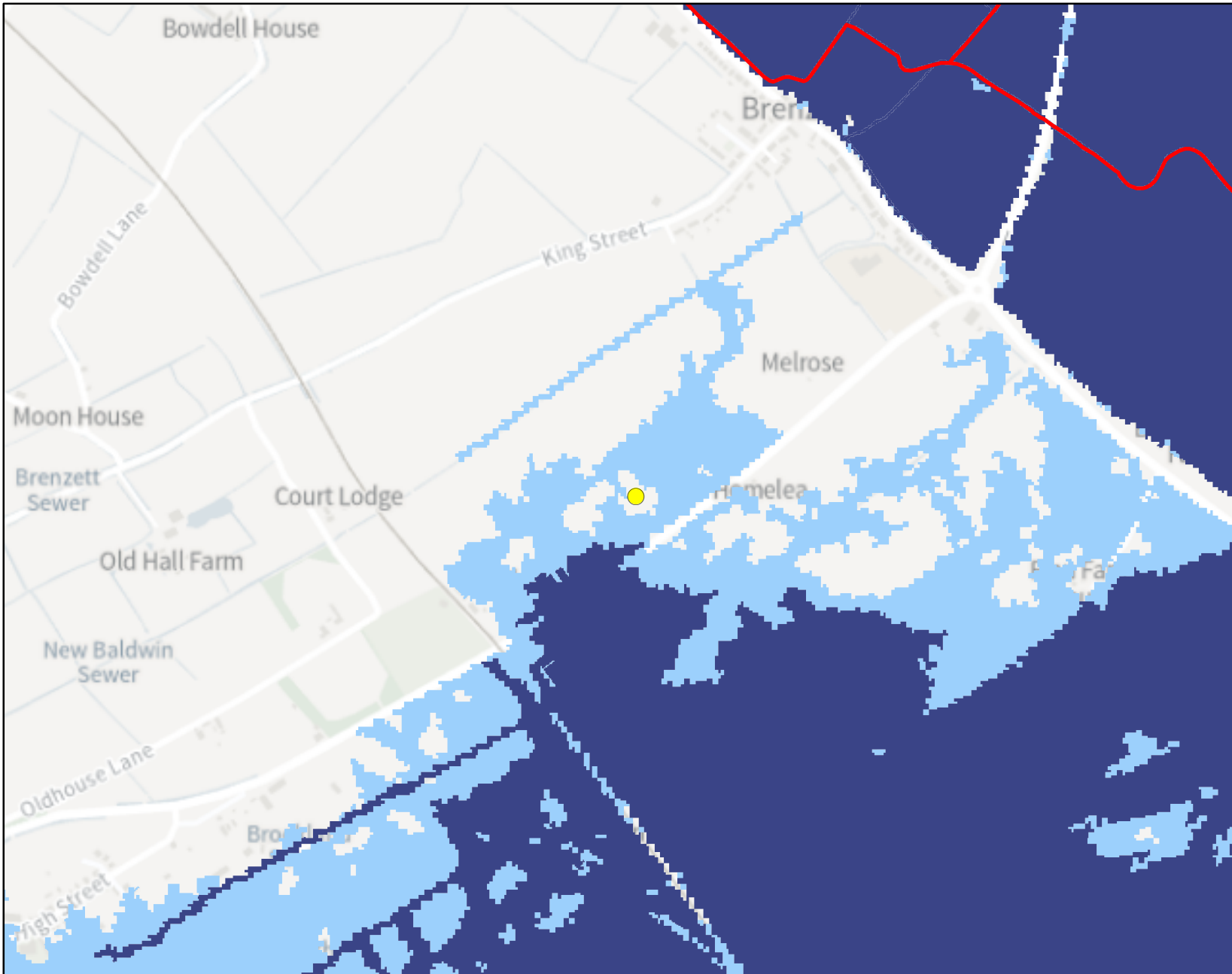
The Flood Map shows that part of this site lies is not within the current 'Extreme Flood Outline'. According to the Flood Map, which provides a general estimate of the likelihood of flooding across England & Wales, this/your property/site is shown to have less than 0.1% chance of flooding in any year from rivers and/or the sea.

Enclosed is an extract of our Flood Map which shows this information for your area.

Method of production

The Flood Map at this location has been derived using detailed tidal modelling of Romney Marsh, completed by JBA Consulting in 2020. The defended and undefended modelled outputs have been combined to produce the Flood Zones in order to capture the full flood risk from still water and wave overtopping.





**Flood Map centred on TN29 9QT 599991, 126610
created 04 November 2025 [Ref: EIR2025-36515]**



Scale 1: 10,000



Legend

-  Site Location
-  Main Rivers
-  Flood Zone 2
-  Flood Zone 3

**Flood Map for Planning
(assuming no defences)**

Flood Zone 3 shows the area that could be affected by flooding:

- from the sea with a 0.5% or greater chance of occurring each year
- or from a river with a 1% or greater chance of occurring each year.

Flood Zone 2 shows the extent of an extreme flood from rivers or the sea with up to a 0.1% chance of occurring each year.

Model Output Data

You have requested flood levels and depths for various return periods at this location.

A 2D TuFLOW model has been used to represent the floodplain as a grid. The flood water levels and/or depths have been calculated for each grid cell. The modelled flood levels / depths presented here are for the closest most appropriate model grid cells. Any additional information you may need to know about the modelling from which they are derived and any specific health warnings for their use are set out below.

A map showing the location of the points from which the data is taken is enclosed. Please refer to the [Open Government Licence](#) which explains the permitted use of this information.

This model has been designed for catchment wide flood risk mapping. It should be noted that it was not created to produce flood levels for specific development sites.

Romney Marsh baseline tidal mapping and data

Coastal flood boundary data set

The extreme sea levels used in the model were derived from the 'Coastal flood boundary conditions for UK mainland and islands' (*Defra; SEPA; The Scottish Government; Environment Agency, 2011*). The coastal flood boundary dataset was uplifted to a base year of 2018.

Model limitations

The flood inundation model has not considered infiltration losses into the ground. Additionally, no surface water drainage systems or sewer networks are included in the model. All wave overtopping calculations assume a static beach profile.

Undefended outputs

The undefended model scenarios are still water only and did not include any inflow boundaries for wave overtopping.

Climate change

The 0.5% AEP and 0.1% AEP climate change scenarios projected to 2070 and 2115 were modelled using National Planning Policy Framework (NPPF) 2016 guidance. The increases in sea level are shown in the table below.

NPPF sea level rise (SLR) estimates, metres per year (2008 base year)

Guidance	SLR projected to 2070	SLR projected to 2115
NPPF	0.521	1.166

In addition to sea level rise, the model applied an increase of 10% to both offshore wind speed and wave height for the 2070 and 2115 epochs. This is in line with NPPF 2016 guidance. Please note climate change allowances have been updated since this model was produced. Please refer to the following website for the latest guidance: <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>.

Data Points Map centred on TN29 9QT 599991, 126610
created 04 November 2025 [Ref: EIR2025-36515]



Legend

- Data Points



Scale 1:1,500

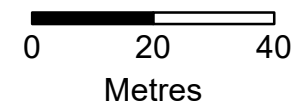


Table 1: Modelled undefended tidal flood levels for Annual Exceedance Probability (AEP) events shown (mAOD)

Point ID	National Grid Reference		Modelled Tidal Flood Levels for Annual Exceedance Probability (AEP) events shown (metres AOD)									
			Undefended									
	Easting	Northing	20% AEP	5% AEP	2% AEP	1.33% AEP	0.5% AEP	0.1% AEP	0.5% AEP + CC (2070)	0.1% AEP + CC (2070)	0.5% AEP + CC (2115)	0.1% AEP + CC (2115)
1	599954	126454	0.00	0.00	0.00	0.00	2.29	2.60	3.41	3.55	4.45	4.62
2	600061	126530	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.62
3	600142	126591	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.62
4	599948	126635	0.00	0.00	0.00	0.00	0.00	2.59	3.41	3.55	4.45	4.61
5	599994	126678	0.00	0.00	0.00	0.00	0.00	2.57	3.41	3.55	4.45	4.61
6	599984	126642	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
7	599973	126615	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
8	600015	126644	0.00	0.00	0.00	0.00	0.00	2.56	3.41	3.55	4.45	4.61
9	600006	126615	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
10	599994	126585	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
11	600038	126610	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
12	600024	126585	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.61
13	600011	126557	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.62
14	600056	126583	0.00	0.00	0.00	0.00	0.00	0.00	3.41	3.55	4.45	4.62
15	600043	126563	0.00	0.00	0.00	0.00	0.00	2.57	3.41	3.55	4.45	4.62
16	600024	126537	0.00	0.00	0.00	0.00	0.00	2.60	3.41	3.55	4.45	4.62
17	600068	126564	0.00	0.00	0.00	0.00	0.00	2.56	3.41	3.55	4.45	4.62
18	600031	126524	0.00	0.00	0.00	0.00	0.00	2.60	3.41	3.55	4.45	4.62
19	600055	126543	0.00	0.00	0.00	0.00	0.00	2.60	3.41	3.55	4.45	4.62
20	600075	126556	0.00	0.00	0.00	0.00	0.00	2.56	3.41	3.55	4.45	4.62

Data taken from the Romney Marsh Tidal Mapping Study, completed by JBA Consulting in 2020.

Values of 0.00 indicate locations at which the selected points lie outside of a particular modelled flood extent.

Climate change (CC) data represents modelled levels with an allowance for sea level rise for the years specified. In addition to sea level rise, the model applied an increase of 10% to both offshore wind speed and wave height for the 2070 and 2115 epochs. This is in line with 2016 NPPF guidance which has since been updated.

See Model Output Data section for health warnings and further information.

Table 2: Modelled defended tidal flood levels for Annual Exceedance Probability (AEP) events shown (mAOD)

Point ID	National Grid Reference		Modelled Tidal Flood Levels for Annual Exceedance Probability (AEP) events shown (metres AOD)									
			Defended									
	Easting	Northing	20% AEP	5% AEP	2% AEP	1.33% AEP	0.5% AEP	0.1% AEP	0.5% AEP + CC (2070)	0.1% AEP + CC (2070)	0.5% AEP + CC (2115)	0.1% AEP + CC (2115)
1	599954	126454	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	600061	126530	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	600142	126591	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	599948	126635	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	599994	126678	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	599984	126642	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	599973	126615	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	600015	126644	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	600006	126615	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	599994	126585	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	600038	126610	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	600024	126585	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	600011	126557	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	600056	126583	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	600043	126563	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	600024	126537	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	600068	126564	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	600031	126524	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	600055	126543	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	600075	126556	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Data taken from the Romney Marsh Tidal Mapping Study, completed by JBA Consulting in 2020.

Values of 0.00 indicate locations at which the selected points lie outside of a particular modelled flood extent.

Climate change (CC) data represents modelled levels with an allowance for sea level rise for the years specified. In addition to sea level rise, the model applied an increase of 10% to both offshore wind speed and wave height for the 2070 and 2115 epochs. This is in line with 2016 NPPF guidance which has since been updated.

See Model Output Data section for health warnings and further information.

Table 3: Modelled undefended tidal flood depths for Annual Exceedance Probability (AEP) events shown (m)

Point ID	National Grid Reference		Modelled Tidal Flood Depths for Annual Exceedance Probability (AEP) events shown (metres)									
			Undefended									
	Easting	Northing	20% AEP	5% AEP	2% AEP	1.33% AEP	0.5% AEP	0.1% AEP	0.5% AEP + CC (2070)	0.1% AEP + CC (2070)	0.5% AEP + CC (2115)	0.1% AEP + CC (2115)
1	599954	126454	0.00	0.00	0.00	0.00	0.13	0.44	1.24	1.39	2.29	2.45
2	600061	126530	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.75	1.65	1.81
3	600142	126591	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.66	1.56	1.73
4	599948	126635	0.00	0.00	0.00	0.00	0.00	0.24	1.06	1.20	2.10	2.26
5	599994	126678	0.00	0.00	0.00	0.00	0.00	0.21	1.05	1.20	2.10	2.26
6	599984	126642	0.00	0.00	0.00	0.00	0.00	0.00	0.85	1.00	1.89	2.06
7	599973	126615	0.00	0.00	0.00	0.00	0.00	0.00	0.89	1.04	1.94	2.10
8	600015	126644	0.00	0.00	0.00	0.00	0.00	0.03	0.88	1.02	1.92	2.08
9	600006	126615	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.92	1.81	1.98
10	599994	126585	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.92	1.82	1.98
11	600038	126610	0.00	0.00	0.00	0.00	0.00	0.00	0.86	1.01	1.91	2.07
12	600024	126585	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.91	1.81	1.97
13	600011	126557	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.96	1.86	2.03
14	600056	126583	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.99	1.89	2.05
15	600043	126563	0.00	0.00	0.00	0.00	0.00	0.03	0.86	1.01	1.91	2.07
16	600024	126537	0.00	0.00	0.00	0.00	0.00	0.10	0.90	1.05	1.95	2.11
17	600068	126564	0.00	0.00	0.00	0.00	0.00	0.12	0.96	1.11	2.01	2.17
18	600031	126524	0.00	0.00	0.00	0.00	0.00	0.04	0.78	0.93	1.83	1.99
19	600055	126543	0.00	0.00	0.00	0.00	0.00	0.02	0.81	0.95	1.85	2.02
20	600075	126556	0.00	0.00	0.00	0.00	0.00	0.12	0.88	1.02	1.92	2.09

Data taken from the Romney Marsh Tidal Mapping Study, completed by JBA Consulting in 2020.

Values of 0.00 indicate locations at which the selected points lie outside of a particular modelled flood extent.

Climate change (CC) data represents modelled depths with an allowance for sea level rise for the years specified. In addition to sea level rise, the model applied an increase of 10% to both offshore wind speed and wave height for the 2070 and 2115 epochs. This is in line with 2016 NPPF guidance which has since been updated.

See Model Output Data section for health warnings and further information.

Table 4: Modelled defended tidal flood depths for Annual Exceedance Probability (AEP) events shown (m)

Point ID	National Grid Reference		Modelled Tidal Flood Depths for Annual Exceedance Probability (AEP) events shown (metres)									
			Defended									
	Easting	Northing	20% AEP	5% AEP	2% AEP	1.33% AEP	0.5% AEP	0.1% AEP	0.5% AEP + CC (2070)	0.1% AEP + CC (2070)	0.5% AEP + CC (2115)	0.1% AEP + CC (2115)
1	599954	126454	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	600061	126530	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	600142	126591	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	599948	126635	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	599994	126678	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	599984	126642	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	599973	126615	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	600015	126644	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	600006	126615	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	599994	126585	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	600038	126610	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	600024	126585	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	600011	126557	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	600056	126583	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	600043	126563	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	600024	126537	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	600068	126564	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	600031	126524	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	600055	126543	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	600075	126556	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00


Data taken from the Romney Marsh Tidal Mapping Study, completed by JBA Consulting in 2020.

Values of 0.00 indicate locations at which the selected points lie outside of a particular modelled flood extent.


Climate change (CC) data represents modelled depths with an allowance for sea level rise for the years specified. In addition to sea level rise, the model applied an increase of 10% to both offshore wind speed and wave height for the 2070 and 2115 epochs. This is in line with 2016 NPPF guidance which has since been updated.

See Model Output Data section for health warnings and further information.

**Undefended Tidal Flood Extents Map centred on TN29 9QT 599991, 126610
created 04 November 2025 [Ref: EIR2025-36515]**



N



Legend

- Site Location

Undefended Tidal Flood Extents


Id

- 20% AEP
- 5% AEP
- 2% AEP
- 1.33% AEP
- 0.5% AEP
- 0.1% AEP
- 0.5% AEP + CC (2070)
- 0.1% AEP + CC (2070)
- 0.5% AEP + CC (2115)
- 0.1% AEP + CC (2115)

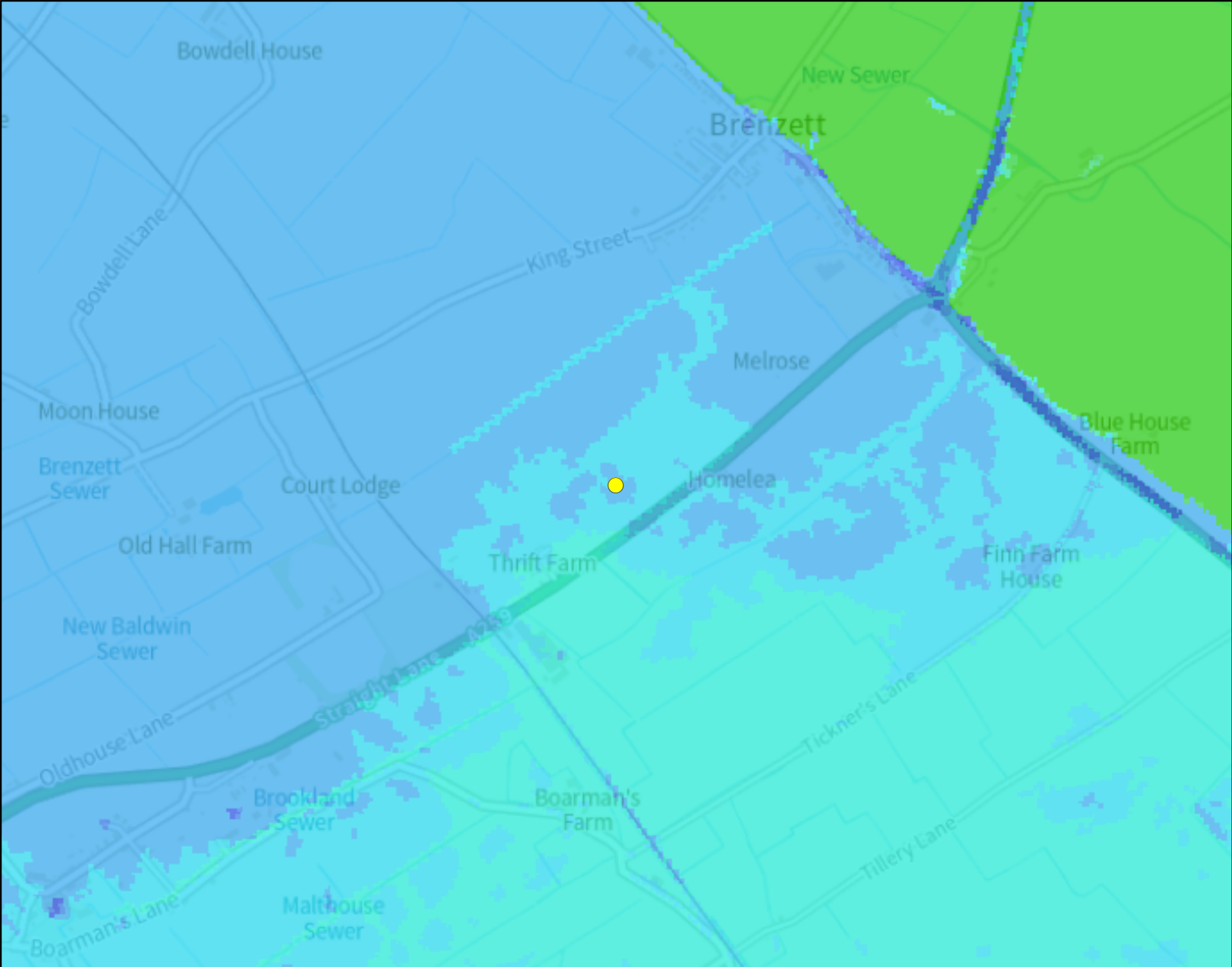
Annual Exceedance Probability (AEP). The probability of a flood of a particular magnitude, or greater, occurring in any given year.

Climate Change (CC) extents based on modelled flood extents with an allowance for sea level rise, for the years specified.

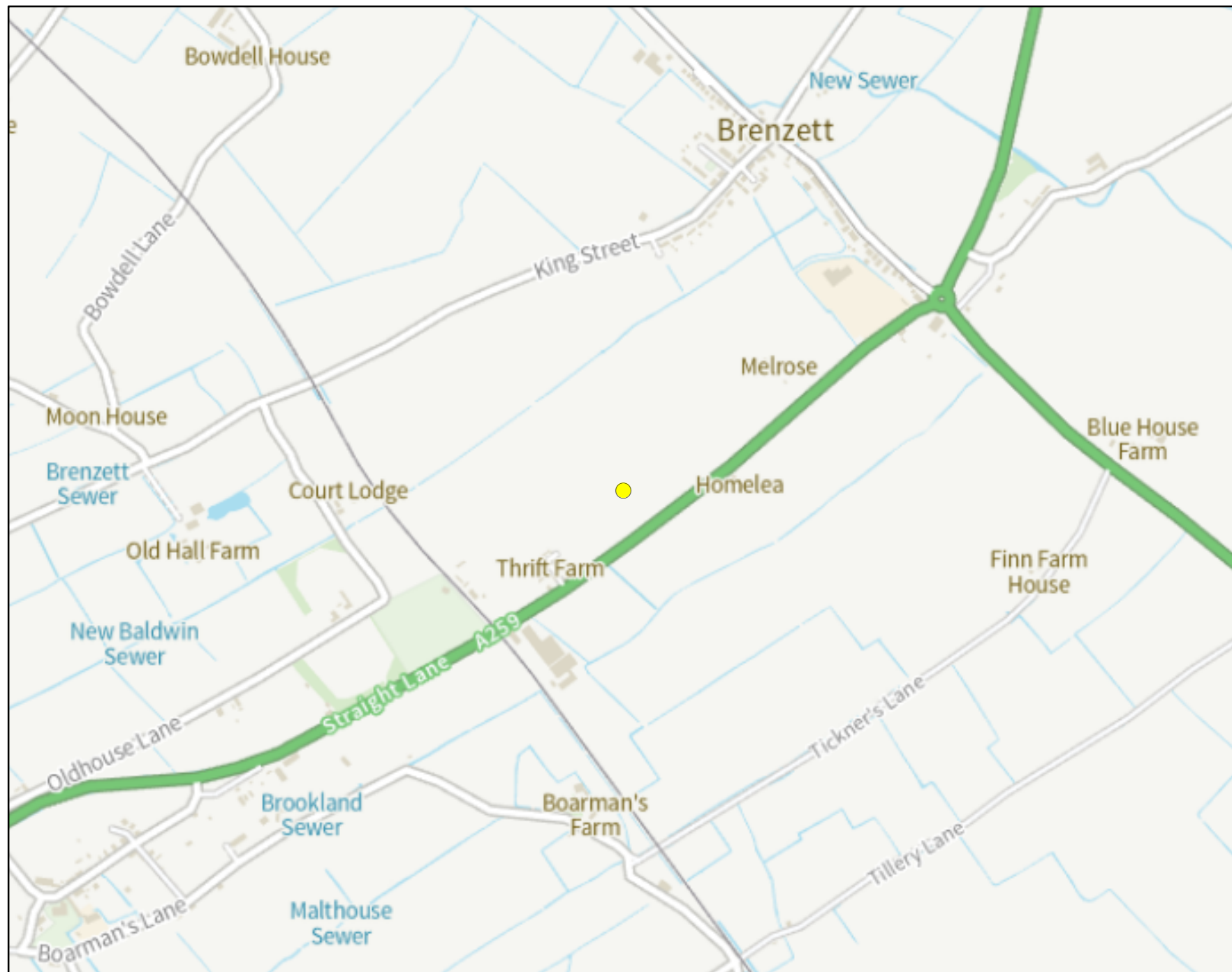
Scale 1:10,000




0 250 500
Metres




**Defended Tidal Flood Extents Map centred on TN29 9QT 599991, 126610
created 04 November 2025 [Ref: EIR2025-36515]**





N



Legend

- Site Location

Defended Tidal Flood Extents

Id

- █ 20% AEP
- █ 5% AEP
- █ 2% AEP
- █ 1.33% AEP
- █ 0.5% AEP
- █ 0.1% AEP
- █ 0.5% AEP + CC (2070)
- █ 0.1% AEP + CC (2070)
- █ 0.5% AEP + CC (2115)
- █ 0.1% AEP + CC (2115)

Annual Exceedance Probability (AEP). The probability of a flood of a particular magnitude, or greater, occurring in any given year.

Climate Change (CC) extents based on modelled flood extents with an allowance for sea level rise, for the years specified.

Scale 1:10,000

0 250 500

Metres

Defence Details

There are no formal flood defences owned or maintained by the Environment Agency in the vicinity of this site.

Romney Marsh Defences

Due to the flat nature of Romney Marsh, much of which is below present day high tide level, flooding could regularly occur from many areas along the coast without properly maintained sea defences.

The following link details the schemes that make up the defences for Romney Marsh [Folkestone to Cliff End flood risk management strategy - GOV.UK](#) . The Lydd Scheme has been completed (although not updated on the link). The Lydd Ranges Scheme has a design life of 25 years from 2020 with a 0.5%AEP SoP.

Historic Flood Data

Flood Event Data

We do not hold records of historic flood events from rivers and/or the sea affecting the area local to this property. However, please be aware that this does not necessarily mean that flooding has not occurred here in the past, as our records are not comprehensive.

Please note that our records are not comprehensive. We would therefore advise that you make further enquiries locally with specific reference to flooding at this location. You should consider contacting the relevant Local Planning Authority and/or water/sewerage undertaker for the area.

We map flooding to land, not individual properties. Our historic flood event record outlines are an indication of the geographical extent of an observed flood event. Our historic flood event outlines do not give any indication of flood levels for individual properties. They also do not imply that any property within the outline has flooded internally.

Please be aware that flooding can come from different sources. Examples of these are:

- from rivers or the sea
- surface water (i.e. rainwater flowing over or accumulating on the ground before it is able to enter rivers or the drainage system)
- overflowing or backing up of sewer or drainage systems which have been overwhelmed
- groundwater rising up from underground aquifers

Currently the Environment Agency can only supply flood risk data relating to the chance of flooding from rivers or the sea. However you should be aware that in recent years, there has been an increase in flood damage caused by surface water flooding or drainage systems that have been overwhelmed.

Additional Information

Information Warning - OS background mapping

The mapping of features provided as a background in this product is © Ordnance Survey. It is provided to give context to this product. The Open Government Licence does not apply to this background mapping. You are granted a non-exclusive, royalty free, revocable licence solely to view the Licensed Data for non-commercial purposes for the period during which the Environment Agency makes it available. You are not permitted to copy, sub-license, distribute, sell or otherwise make available the Licensed Data to third parties in any form. Third party rights to enforce the terms of this licence shall be reserved to OS.

Planning advice and guidance

The Environment Agency are keen to work with partners to enable development which is resilient to flooding for its lifetime and provides wider benefits to communities. If you have requested this information to help inform a development proposal, then we recommend engaging with us as early as possible by using the pre-application form available from our website:

<https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion>

Complete the form in the link and email back to kslplanning@environment-agency.gov.uk.

We recognise the value of early engagement in development planning decisions. This allows complex issues to be discussed, innovative solutions to be developed that both enables new development and protects existing communities. Such engagement can often avoid delays in the planning process following planning application submission, by reaching agreements up-front. We offer a charged pre-application advice service for applicants who wish to discuss a development proposal.

We can also provide a preliminary opinion for free which will identify environmental constraints related to our responsibilities including flooding, waste, land contamination, water quality, biodiversity, navigation, pollution, water resources, foul drainage or Environmental Impact Assessment.

Flood Risk Assessments Guidance

Flood risk standing advice for applicants

In preparing your planning application submission, you should refer to the Environment Agency's Flood Risk Standing Advice and the Planning Practice Guidance for information about what flood risk assessment is needed for new development in the different Flood Zones. This information can be accessed via:

<https://www.gov.uk/flood-risk-assessment-standing-advice>

<http://planningguidance.planningportal.gov.uk/>

<https://www.gov.uk/guidance/flood-risk-assessment-for-planning-applications>

<https://www.gov.uk/guidance/flood-risk-and-coastal-change>

You should also consult the Strategic Flood Risk Assessment and flood risk local plan policies produced by your local planning authority.

You should note that:

1. Information supplied by the Environment Agency may be used to assist in producing a Flood Risk Assessment where one is required, but does not constitute such an assessment on its own.
2. This information covers flood risk from main rivers and the sea, and you will need to consider other potential sources of flooding, such as groundwater or overland runoff. You should discuss surface water management with your Lead Local Flood Authority.
3. Where a planning application requires a FRA and this is not submitted or deficient, the Environment Agency may well raise an objection due to insufficient information

Surface Water

We have provided two national Surface Water maps, under our Strategic Overview for flooding, to your Lead Local Flood Authority, who are responsible for local flood risk (i.e. surface runoff, ground water and ordinary watercourse), which alongside their existing local information will help them in determining what best represents surface water flood risk in your area.

Your Lead Local Flood Authority have reviewed these and determined what it believes best represents surface water flood risk. You should therefore contact this authority so they can provide you with the most up to date information about surface water flood risk in your area.

You may also wish to consider contacting the appropriate relevant Local Planning Authority and/or water/sewerage undertaker for the area. They may be able to provide some knowledge on the risk of flooding from other sources. We are working with these organisations to improve knowledge and understanding of surface water flooding.

