MAY 2021

FLOOD RISK ASSESSMENT

LAND TO SOUTH OF 88 TEIGNMOUTH ROAD, CLEVEDON BS21 6DR

ON BEHALF OF: **MR JEREMY WADLEY**

stokesmorgan
planning

Stokes Morgan Planning Ltd
Kestrel Court
1 Harbour Road
Portishead
BS20 7AN

www.stokesmorgan.co.uk
01275 390648

1. EXECUTIVE SUMMARY

1.1. This Flood Risk Assessment (FRA) accompanies a full planning application made on behalf of Mr Jeremy Wadley for:

'Erection of a detached dwelling.'

1.2. The site is located in Flood Zone 3a and consequently the National Planning Policy Framework (NPPF, February 2019) requires a site-specific FRA for the proposed development site to assess the vulnerability of the site from all sources of flood risk and identify any necessary flood resilience measures to ensure the development is safe from flood risk for its lifetime.

1.3. In this case, the proposal is for the erection of a new dwelling on land to the south of 88 Teignmouth Road, which currently comprises an area of hardstanding and grass. The site is associated with the adjacent property (88 Teignmouth Road) to the north. The site lies to 120 metres to the south of the Land Yeo, 1.6km to the east of the Bristol Channel.

1.4. This site is shown on the Environment Agency (EA) map as being within Flood Zone 3.

1.5. The site is relatively flat with an AOD level of 6.9m. Whilst the site has a high probability of flooding, being in Flood Zone 3, the presence of substantial coastal defences, together with natural embankments, high ground and culverting to the Land Yeo result in the site being at a low risk from flooding.

1.6. Nonetheless, it is recommended that flood resilience measures are incorporated into the design and construction of the building. Suitable measures are identified at Chapter 4.

1.7. The EA operates a Flood Warning system, which residents need to sign-up to in order to receive the alerts. Therefore, in the unlikely event of flooding on the site, the occupants of the dwelling would receive flood warnings (provided they are signed up to receive them) and subsequently should have sufficient time to make

arrangements to vacate the property prior to the occurrence of the flood event. A condition is recommended to secure submission and approval of a Flood Warning and Evacuation Plan prior to occupation of the development, and subsequently its implementation.

2. THE SITE AND ITS SURROUNDINGS

2.1 The application site is located on Teignmouth Road, to the eastern edge of the Clevedon settlement boundary, with vehicular access from Seymour Close.

2.2 The site is used informally as part of the side garden to 88 Teignmouth Road, though is on a separate Land Registry Title Deed. It comprises a hardstanding and grassed area.

2.3 The topography of the site is generally flat at 6.9mAOD.

2.4 The nearest waterway is the Land Yeo, which runs east-to-west 120 metres to the north, between Teignmouth Road and Old Street. EA data shows the site and environs are at very low risk of surface water flooding (less than 1-in-a-1000 year annual probability), with an area at low risk (1 in 100 to 1 in a 1000 year annual probability) to the west/rear of the terrace.

2.5 The EA flood map shows the site to be in Flood Zone 3 and defended (see Figure 1). Due to the presence of these flood defences, the site is classed as being at a low risk of flooding from tidal and fluvial sources (see Figures 2 and 3).

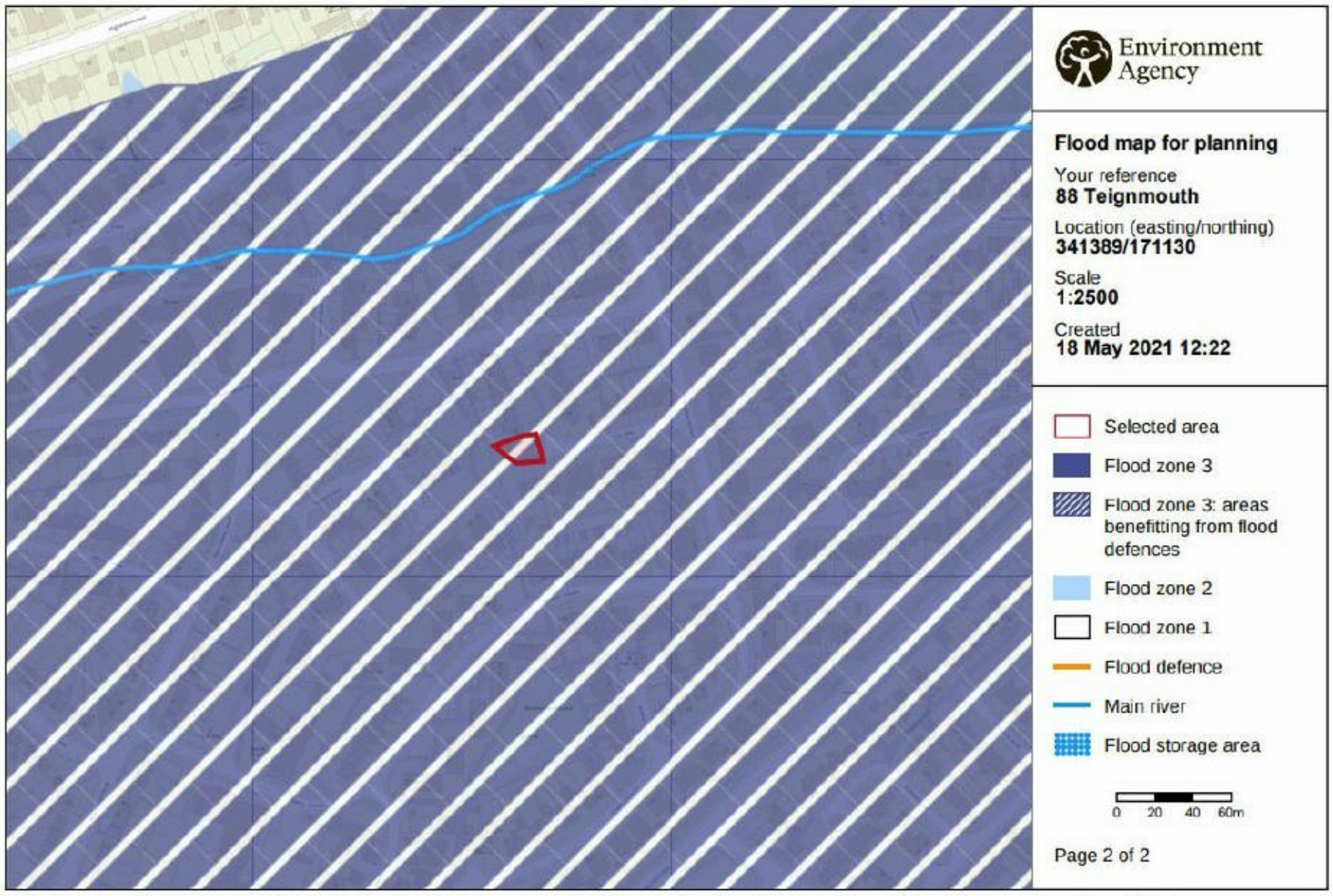


Figure 1: Extract from Environment Agency Flood Zone Map

Figure 2: Extract from Environment Agency Flood Risk Map

Extent of flooding from surface water

Figure 3: Extract from Environment Agency Surface Water Flood Risk Map

3. THE PROPOSED DEVELOPMENT

3.1 The proposed description of development is as follows:

'Erection of a detached dwelling.'

3.2 The North Somerset Council Strategic SFRA states that the design life of residential development should be considered with respect to climate change for 100 years – up to 2108 for residential developments.

4. FLOOD RISK ASSESSMENT

Sources of Flood Risk

4.1 Flood risk is relatively widespread across North Somerset. Both tidal and fluvial flooding are considered to represent the most significant sources of flooding, whilst surface water flooding is also prevalent in several locations.

Ground Water

4.2 There are no major aquifers in the area of the site and the type of soil is primarily calcareous clay overlying alluvial silts atop a Mercia Mudstone Group, which are unlikely to give rise to ground water flood conditions.

Pluvial Runoff

4.3 The relatively flat topography of the area makes pluvial run off extremely unlikely.

Reservoirs – Canals

4.4 There are no reservoirs or canals in this area.

Fluvial Flooding

4.5 The nearest river is the Land Yeo, approximately 120 metres to the north. Historical records do not reveal flooding issues specifically associated with this property. The Level 2 SFRA notes that fluvial flood risk from the Land Yeo at Clevedon has not been assessed due to the predominant nature of the tidal flood risk.

Tidal Flooding

4.6 The Severn Estuary is 1.6km west of the site, and the site is classified by the Environment Agency as being at low risk from tidal flooding. The SFRA includes Clevedon within Area 1 – the coastal strip from Clevedon to Ham Green - and concludes that the majority of the area is at high risk. The SFRA goes on to say that; "The majority of the standard of protection offered along the coastline of Area 1 is

sufficient to maintain a 1 in 200-year standard of protection." It also states that were defences to fail, the "low lying ground to the east of Clevedon would be at moderate to significant hazard, the main differentiating factor being flood depth rather than flood velocity."

4.7 The EA data (see below) for the site reports that, in the defended scenario, the site would not be at risk of flooding.

Defended

AEP	Maximum depth (in metres)	Maximum level (mAOD)
0.1% (1 in 1000)	0.00	0.00
0.5% (1 in 200)	0.00	0.00
0.5% with CC 2068 added	0.00	0.00
0.5% with CC 2118 added	1.45	7.20
20% (1 in 5)	0.00	0.00

Undefended

AEP	Maximum depth (in metres)	Maximum level (mAoD)
0.1% (1 in 1000)	2.30	8.06
0.5% (1 in 200)	2.01	7.76
0.5% with CC 2068 added	2.36	8.12
0.5% with CC 2118 added	2.78	8.53
20% (1 in 5)	1.34	7.10

Historic Flooding

4.8 There is no history of the site having been flooded.

5. SITE SPECIFIC FLOOD RISK ASSESSMENT

5.1 In order for the developments to satisfy the requirements of the NPPF, they must not have an adverse impact on flood risk to third parties and must have a means of safe access/egress during flood conditions.

Mitigation

5.2 The North Somerset Council SFRA identifies how built development can cause flooding by increasing surface water run-off. In this instance all hard surfaces would be permeable, with lawned areas provided, and SUDS proposed. Additional hedgerow, tree and shrub planting is also proposed, which will aid with drainage.

5.3 The risk of flooding in the area would only be in the event of the overtopping of the strategic flood defences and is considered low.

5.4 Floor levels to the property will be set a minimum of 250mm above external finished ground levels with voids underneath, to provide a free board against extreme flooding events.

5.5 Flood resilience has been taken into consideration during the design of the new building including flood resistant construction materials to be used where practicable including concrete floor slabs and closed cell insulation.

5.6 All electrical fittings will be positioned at 1200mm above floor level.

5.7 As gas meters can be affected by floodwater it is worth considering raising meters above the expected flood levels. Provision should be made for purging gas supply pipes through the installation of appropriate valves and drain points.

5.8 Gas and oil-fired boilers and associated pumps and controls should preferably be installed above the maximum expected flood level. Pipe insulation below the expected flood level should preferably be replaced with closed cell insulation. If new heating is being installed, pipework routes should be made easily accessible to allow pipes to be maintained and washed down following flooding.

5.9 Water pipework insulation can be replaced with flood resistant closed cell material below the expected flooding level. Non-return valve should be used on all drainage connections.

5.10 Suppliers of telephone and cable services should be consulted on suitable installation methods in areas liable to flooding. Where possible, incoming telephone lines and internal control boxes should be raised above the expected flood levels.

5.11 A Flood Warning and Evacuation Plan should be prepared and implemented. These are explained below.

Flood Warnings

5.12 The EA operate a flood warning and alert service in areas at risk of flooding from rivers or the sea, which relies on direct measurements of rainfall, river levels, tide levels, in house predictive models, rainfall radar data and information from the Met Office. This service operates 24 hours a day, 365 days a year.

5.13 If flooding is forecast, warnings are issued using a set of easily recognisable codes:

- Flood Alert - A Flood Alert means that flooding is possible and that occupants need to be prepared.
- Flood Warning - means that flooding is expected and that occupants should take immediate action. Occupants should take action when a flood warning is issued and not wait for a severe flood warning.
- Severe Flood Warning - means that there is severe flooding and danger to life. These are issued when flooding is posing significant risk to life or disruption to communities.

Floodline Warnings Direct

5.14 The EA's Flood Warning Service includes estimated Response Times. For fluvial flooding sources, where possible a 2-hour flood warning would normally precede flooding from main rivers.

Evacuation Plan

5.15 An Evacuation Plan provides a strategy for evacuating the property in the event of a flood. This could be secured by condition and provided for the residents.

5.16 In this instance the safest option will be to evacuate to the first floor (which is above the 1-in-200 year undefended scenario predicted levels) and wait for assistance.

5.17 The building should only be reoccupied when (i) the flooding has subsided; and (ii) the residents have received the all-clear from the EA.

6. CONCLUSIONS

6.1 This site is shown on the EA map as being within Flood Zone 3a.

6.2 Due to the presence of substantial flood defences, the site is identified (on EA Flood Risk Maps) to be at low risk from tidal and fluvial flooding.

6.3 Suitable mitigation is proposed to ensure that the flood risk is minimised.

6.4 In the unlikely event of flooding on the site, the occupants would receive flood warnings and would be advised to remain in their properties at first floor level.

creating a better place

Environment Agency

John Rooney
Stokes Morgan
john.rooney@stokesmorgan.co.uk

Our ref: 211530-WX
Your ref:
Date: 23 April 2021

Dear John

Thank you for your enquiry which was received on the 24th March 2021.

Abstract

Name	Product 4
Description	Detailed Flood Risk Assessment Map for **88 Teignmouth Road, Clevedon, BS21 6DR**
Information Warnings	*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.*
Attribution	Contains Environment Agency information © Environment Agency and/or database rights. Contains Ordnance Survey data © Crown copyright 2019 Ordnance Survey 100024198.

Flood Map for Planning

The Flood Map for Planning is now classed as Open Data. It can be downloaded free of charge under an open data licence from the following link https://data.gov.uk/publisher/environment-agency

If you search for the 'flood map for planning' in the search box the following datasets will be available for you select and download the data:

- Flood Map for Planning (Rivers and the Sea) – Flood Zones 2 and 3
- Flood Map for Planning (Rives and Sea) – Areas Benefiting from Defences
- Flood Map for Planning (Rivers and Sea) Flood Storage Areas
- Flood Map for Planning – Spatial Flood Defences (without Standard attributes)
- Recorded Flood Outlines
- Historic Flood Map
- Risk of Flooding from Surface Water Extent for:
  - → 3 percent annual chance
  - → 1 percent annual chance
  - → 0.1 percent annual chance

If you have requested this information to help inform a development proposal, then you should also note the detail in the attached advisory text on the use of Environment Agency Information and Further Guidance for FRAs.

Customer & Engagement, Wessex
Rivers House, East Quay, Bridgwater, Somerset, TA6 4YS
Phone: 02030 250 376
Email: wessexenquiries@environment-agency.gov.uk
www.environment-agency.gov.uk

Flooding history
We no longer produce pdf copies of the Historic Flood Map. This information is available to search select, and download free of charge as part of the Government's 'open data' as

- Recorded Flood Outlines
- the Historic Flood Map

These are GIS layers and can be download from: https://data.gov.uk/publisher/environment-agency

Strategic Flood Risk Assessment (SFRA)
When preparing a FRA to support a development proposal in this location you should refer to North Somerset's Council's SFRA website, which is available via the following link: http://www.n-somerset.gov.uk/my-services/planning-building-control/planningpolicy/supplementary-planning-advice/guidance/strategic-flood-risk-assessment/

Planning
If you have questions regarding the planning nature of your enquiry, or require advice on floor levels, please contact our Sustainable Places team on NWX.SP@environment-agency.gov.uk. Please be aware that we now charge for planning advice when consulted on pre-application enquiries. This new approach provides advice to developers in two ways. Firstly there is the provision of 'free' advice available to everyone where we give a preliminary opinion on a proposed development. This sets out the environmental constraints together with any issues this raises for us. Should you wish us to review in detail any of these issues then we can do this through a chargeable scheme aimed at recovering our costs.

Flood Levels
Fluvial flood levels and depths
The attached map contains a set of modelled fluvial flood level node locations/unique identifiers, for the main river Land Yeo, taken from our Clevedon Flood Mapping Study (2012) SW093 (Updated Grids 2015) model. A sheet is also attached providing the associated flood levels, NGRs and further information for the river channel relating to each of these nodes. Please note that the labels annotated to the Node Location Map are unique node identifiers and not the associated flood levels.

Node type information:

- 1D_fluvial
  - In channel nodes, no 2D element to the modelling
- 2D_fluvial
  - In channel nodes, 2D data available from the modelling
- Interpolated sections
  - Calculated weighted averages of the river or conduit section properties upstream and downstream to produce a hybrid section according to the location of the interpolated section. They are used to ensure a smooth gradation or transition between cross sections to avoid sudden variations which can cause instability in a model. This may be where the distance between surveyed cross sections is large and there is a steep gradient to the channel or other distinct changes between the two sections.
- Replicate sections
  - Used to copy the preceding river or conduit section at a distance further along the reach and at a lower level. The Replicated Section is a quick method for adding a cross-section which has exactly the same dimensions as the cross-section immediately upstream.
- Reservoir
  - Modelled measurements outside the boundary of the river channel

Interpolated and Replicate sections are not surveyed sections, however they are based on surveyed section data and the results from them can be used as long as their limitations are understood.

Customer & Engagement, Wessex
Rivers House, East Quay, Bridgwater, Somerset, TA6 4YS
Phone: 02030 250 376
Email: wessexenquiries@environment-agency.gov.uk
www.environment-agency.gov.uk

If you intend undertaking a FRA for a planning application using climate change flood level information supplied in this letter, you should consider whether it is appropriate in light of a range of potential allowances for fluvial flood flow now advised in curent planning guidance on 'Flood risk assessments: climate change allowances'.

The relevant guidance is available at the following website address:
https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances

The 2D data from this model did not intersect with the site boundary provided.

The modelled extent of the River Land Yeo is from upstream at ST 39209 70542 to downstream at ST 46978 71658.

Levels and depths have been extracted based upon the site boundary plan provided.

Coastal/tidal flood levels and depths

The tables below show the maximum modelled tidal flood levels and depths for defended (actual situation) and undefended (natural floodplain) scenarios taken from our 2020 Woodspring Bay modelling. The annual exceedance probability (AEP) is given.

*Please note. We have provided you with climate change data based on National Planning and Policy Framework (NPPF) guidance. We advise that this data is suitable for the use in an FRA, but we also have climate change data base on UK Climate Projections 2009 (UKCP09) if required.

We advise that the extracted level and depth data provided below is suitable for use in an FRA. If you require level and depth data from additional return periods, these .asc grids can be requested as part of a Product 6.

Defended

AEP	Maximum depth (in metres)	Maximum level (mAOD)
0.1% (1 in 1000)	0.00	0.00
0.5% (1 in 200)	0.00	0.00
0.5% with CC 2068 added	0.00	0.00
0.5% with CC 2118 added	1.45	7.20
20% (1 in 5)	0.00	0.00

Undefended

AEP	Maximum depth (in metres)	Maximum level (mAoD)
0.1% (1 in 1000)	2.30	8.06
0.5% (1 in 200)	2.01	7.76
0.5% with CC 2068 added	2.36	8.12
0.5% with CC 2118 added	2.78	8.53
20% (1 in 5)	1.34	7.10

Levels and depths have been extracted based upon the site boundary plan provided.

Flood Defences

Please find enclosed details of Flood Defences within the vicinity of the site boundary. This information has been taken from our Asset Information Management System database (AIMS).

Customer & Engagement, Wessex
Rivers House, East Quay, Bridgwater, Somerset, TA6 4YS
Phone: 02030 250 376
Email: wessexenquiries@environment-agency.gov.uk
www.environment-agency.gov.uk

Environmental Permit for Flood Risk Activities
In addition to any other permission(s) that you may have already obtained e.g. planning permission, you may need an environmental permit for flood risk activities (formerly known as Flood Defence Consent prior to 06 April 2016) if you want to do work:

- in, under, over or near a main river (including where the river is in a culvert)
- on or near a flood defence on a main river
- in the flood plain of a main river
- on or near a sea defence

For further information and to check whether a permit is required please visit:
https://www.gov.uk/guidance/flood-risk-activities-environmental-permits.

For any further advice, please contact your local Environment Agency Office, at
bridgwater.frap@environment-agency.gov.uk.

Further Information
We advise that you also contact the Flood Risk Department, floodrisk@n-somerset.gov.uk, telephone 01275 888802, at North Somerset Council, Walliscote Grove Road, Weston-super-Mare, BS23 1UJ as they may be able to provide further advice with respect to localised flooding and drainage issues.

Further details about the Environment Agency information supplied can be found on our website:
https://www.gov.uk/browse/environment-countryside/flooding-extreme-weather

If you have requested this information to help inform a development proposal, then you should note the information on GOV.UK on the use of Environment Agency Information for FRAs:
https://www.gov.uk/planning-applications-assessing-flood-risk
https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion

We hope you find this information helpful and it is provided subject to the guidance below, which we strongly recommend you read.

Yours sincerely

[redacted]
Chris Doyle
Customer & Engagement, Wessex
Rivers House, East Quay, Bridgwater, Somerset, TA6 4YS
Email: wessexenquiries@environment-agency.gov.uk
Telephone number: 03708 506 506

Enc: Use of Environment Agency Information for Flood Risk Assessments (below)
211530-WX Node Location Map
211530-WX Node Data
211530-WX Defence Map
211530-WX Defence Data

Use of Environment Agency Information for Flood Risk Assessments (FRAs)

Important
Use of Environment Agency data: you should note that

1. Information supplied by the Environment Agency may be used to assist in producing a Flood Risk Assessment (FRA) where one is required, but the use of Environment Agency information does not constitute such an assessment on its own.

2. As part of your data request, we have provided all of the modelled data we hold for your location. Please note that some of our modelled information may have been produced for purposes other than for flood zone generation. This may mean that some of the modelled data you have been provided with has a lower confidence level, and has not been used in producing our flood map, nor definitively reflects the predicted flood water level at the property/development site scale. To check the suitability of the use of this information in your FRA please contact your local Partnership & Strategic Overview (PSO) team.

3. 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 surface water runoff. The information produced by the Local Planning Authority and the Lead Local Flood Authority (LLFA) may assist in assessing other sources of flood risk.

4. Where a planning application requires a FRA and this is not submitted or deficient, the Environment Agency may well raise an objection.

5. For more significant proposals in higher flood risk areas, we would be pleased to discuss details with you ahead of making any planning application, and you should also discuss the matter with your Local Planning Authority.

Pre-Planning Advice from the Environment Agency
If you have requested this information to help inform a development proposal, then we recommend that you undertake a formal pre-application enquiry using the form available from our website:

Pre-application Preliminary Opinion:
https://www.gov.uk/government/publications/pre-planning-application-enquiry-form-preliminary-opinion

Pre-application Charged Service:
https://www.gov.uk/government/publications/planning-advice-environment-agency-standard-terms-and-conditions

Depending on the enquiry we may also provide advice on other issues related to our responsibilities, including flooding, waste, land contamination, water quality, biodiversity, navigation, pollution, water resources, foul drainage or Environmental Impact Assessment.

Flood Risk Assessment (FRA) Guidance
You should refer to the Planning Practice Guidance of the National Planning Policy Framework (NPPF) and the Environment Agency's Flood Risk Standing Advice for information about Flood Risk Assessment (FRA) for new development in the different Flood Zones. These documents can be accessed via:

National Planning Policy Framework Planning Practice Guidance:
http://planningguidance.planningportal.gov.uk/

Customer & Engagement, Wessex
Rivers House, East Quay, Bridgwater, Somerset, TA6 4YS
Phone: 02030 250 376
Email: wessexenquiries@environment-agency.gov.uk
www.environment-agency.gov.uk

Environment Agency advice on FRAs:
https://www.gov.uk/flood-risk-assessment-for-planning-applications#when-to-follow-standing-advice

https://www.gov.uk/government/publications/planning-applications-assessing-flood-risk

Customer & Engagement, Wessex
Rivers House, East Quay, Bridgwater, Somerset, TA6 4YS
Phone: 02030 250 376
Email: wessexenquiries@environment-agency.gov.uk
www.environment-agency.gov.uk

Product 4 - AIMS Information **211530-WX** **Date: 15/04/2021**

Map Ref	Asset ID	Asset Type	Asset Description	Approx length (m)	Right or left bank	Actual fluvial downstream crest level (mAOD)	Actual fluvial downstream crest level accuracy	Actual fluvial upstream crest level (mAOD)	Actual fluvial upstream crest level accuracy	Actual fluvial coastal crest level (mAOD)	Actual fluvial coastal crest level accuracy	NGR	Most recent inspection	Overall condition
1	1408	high_ground	Natural Bank	325.40	right	5.97	+/->75cm	5.75	+/->75cm	DNR	DNR	ST4322271282	01/04/2021	3
2	1410	high_ground	Stepped Blockwork Wall	19.30	left	5.83	+/->75cm	6.07	+/->75cm	DNR	DNR	ST4059871059	18/06/2020	3
3	1411	high_ground	Stepped Blockwork Wall	13.83	left	5.97	+/->75cm	6.02	+/->75cm	DNR	DNR	ST4064371078	18/06/2020	2
4	1412	high_ground	Blockwork Wall	12.33	left	6.02	+/->75cm	6.05	+/->75cm	DNR	DNR	ST4064971076	18/06/2020	2
5	1430	high_ground	Natural Bank	246.97	left	5.66	+/->75cm	6.04	+/->75cm	DNR	DNR	ST4244472501	01/03/2019	3
6	1431	high_ground	Natural Earth Embankment	61.87	right	5.64	+/->75cm	5.28	+/->75cm	DNR	DNR	ST4327472595	01/03/2019	3
7	1432	high_ground	Natural Earth Embankment	121.03	right	5.88	+/->75cm	5.64	+/->75cm	DNR	DNR	ST4310772546	01/03/2019	3
8	1433	high_ground	Natural Earth Embankment	180.36	right	5.64	+/->75cm	5.79	+/->75cm	DNR	DNR	ST4301472490	01/03/2019	3
9	1435	high_ground	Natural Bank	187.95	left	6.35	+/->75cm	6.17	+/->75cm	DNR	DNR	ST4137471248	18/06/2020	3
10	1436	high_ground	Natural Bank	314.50	left	6.17	+/->75cm	6.26	+/->75cm	DNR	DNR	ST4150071291	18/06/2020	2
11	1437	high_ground	Natural Bank	244.36	right	6.28	+/->75cm	5.90	+/->75cm	DNR	DNR	ST4210171314	18/06/2020	2
12	1439	high_ground	Natural Bank	69.83	right	6.28	+/->75cm	5.96	+/->75cm	DNR	DNR	ST4221271333	18/06/2020	3
13	1407	high_ground	Natural Bank	278.77	right	5.82	+/->75cm	5.60	+/->75cm	DNR	DNR	ST4284071325	01/04/2021	3
14	1440	high_ground	Natural Bank	224.88	left	5.82	+/->75cm	5.82	+/->75cm	DNR	DNR	ST4207071298	18/06/2020	3
19	173690	embankment	Sea Defence - Marshall's Bank 3	357.87	coastal	DNR	DNR	DNR	DNR	10.06	+/- 1 to 5cm	ST3935570500	01/10/2020	2
20	514271	demountable defence	Tidal stoplogs	2.92		DNR	DNR	DNR	DNR	DNR	DNR	ST3987271181	30/07/2020	1
21	514270	demountable defence	Tidal Stoplogs	2.18		DNR	DNR	DNR	DNR	DNR	DNR	ST3968471029	30/07/2020	1
22	172257	embankment	Sea Defence - Marshall's Bank 2	90.70	coastal	DNR	DNR	DNR	DNR	10.10	+/- 1 to 5cm	ST3933070314	01/10/2020	2
27	1473	high_ground	Natural Bank	341.32	left	5.66	+/->75cm	6.55	+/->75cm	DNR	DNR	ST4345371316	01/04/2021	2
33	1480	high_ground	Natural Bank	144.64	right	6.12	+/->75cm	6.28	+/->75cm	DNR	DNR	ST4187771304	18/06/2020	2
36	1541	high_ground	Natural Bank	145.44	right	6.17	+/->75cm	5.76	+/->75cm	DNR	DNR	ST4136171247	18/06/2020	3
37	1542	high_ground	Blockwork Wall	4.01	right	5.76	+/->75cm	5.86	+/->75cm	DNR	DNR	ST4142271277	18/06/2020	2
38	1543	high_ground	Natural Bank	40.30	right	6.07	+/->75cm	6.11	+/->75cm	DNR	DNR	ST4148671297	18/06/2020	2
39	1544	high_ground	Stone Wall Arundel Rd To Parnell Rd	127.90	left	6.26	+/->75cm	6.41	+/->75cm	DNR	DNR	ST4093171125	18/06/2020	3
42	1627	high_ground	Earth Embankment With Berm	162.56	left	6.11	+/- 1 to 5cm	5.11	+/- 1 to 5cm	DNR	DNR	ST4263670335	26/06/2019	3
44	1565	high_ground	Natural Bank	296.58	left	6.75	+/->75cm	5.79	+/->75cm	DNR	DNR	ST4315272560	01/03/2019	3
45	1566	high_ground	Bridge Abutment	26.92	left	5.30	+/->75cm	5.30	+/->75cm	DNR	DNR	ST4068069850	04/11/2019	2
46	1567	high_ground	Concrete Revetment	27.33	left	6.36	+/->75cm	6.22	+/->75cm	DNR	DNR	ST4070769853	04/11/2019	4
47	1628	high_ground	Natural Bank	380.15	left	6.07	+/->75cm	6.45	+/->75cm	DNR	DNR	ST4257270730	26/06/2019	2
48	1629	high_ground	Natural Bank	9.13	left	5.25	+/->75cm	5.67	+/->75cm	DNR	DNR	ST4255970890	26/06/2019	3
49	1630	high_ground	Natural Bank	147.02	left	5.80	+/->75cm	5.70	+/->75cm	DNR	DNR	ST4255370924	26/06/2019	3
50	1631	high_ground	Bridge Abutment	18.91	left	5.80	+/->75cm	5.80	+/->75cm	DNR	DNR	ST4254471059	26/06/2019	3
51	1632	high_ground	Natural Bank	181.20	left	6.80	+/->75cm	6.57	+/->75cm	DNR	DNR	ST4281469763	22/02/2021	3
52	1633	high_ground	Natural Bank	534.87	left	6.16	+/->75cm	5.02	+/->75cm	DNR	DNR	ST4333569737	22/02/2021	3
53	1634	high_ground	Natural Bank	759.67	left	4.58	+/->75cm	5.19	+/->75cm	DNR	DNR	ST4333770065	22/02/2021	3
54	1635	high_ground	Natural Bank	123.95	right	4.34	+/->75cm	4.80	+/->75cm	DNR	DNR	ST4333669746	22/02/2021	3
57	1667	high_ground	Natural Bank	388.58	left	5.85	+/->75cm	5.68	+/->75cm	DNR	DNR	ST3987069870	04/11/2019	3
59	2666	high_ground	Natural Bank	58.50	left	5.75	+/->75cm	6.11	+/->75cm	DNR	DNR	ST4009470565	18/06/2020	3

Map Ref	Asset ID	Asset Type	Asset Description	Approx length (m)	Right or left bank	Actual fluvial downstream crest level (mAOD)	Actual fluvial downstream crest level accuracy	Actual fluvial upstream crest level (mAOD)	Actual fluvial upstream crest level accuracy	Actual fluvial coastal crest level (mAOD)	Actual fluvial coastal crest level accuracy	NGR	Most recent inspection	Overall condition
60	1668	high_ground	Natural Bank	214.12	left	5.68	+/->75cm	6.98	+/->75cm	DNR	DNR	ST4026769749	04/11/2019	3
61	1669	high_ground	Natural Bank	195.45	left	6.98	+/->75cm	7.60	+/->75cm	DNR	DNR	ST4061769822	04/11/2019	3
64	2667	high_ground	Block Stone Revetment	44.74	right	5.43	+/->75cm	6.20	+/->75cm	DNR	DNR	ST4062571082	18/06/2020	3
65	2668	high_ground	Masonry & Brick Building Wall	25.76	right	6.20	+/->75cm	5.87	+/->75cm	DNR	DNR	ST4065671081	18/06/2020	3
66	2669	high_ground	Natural Bank	500.50	left	5.78	+/->75cm	6.04	+/->75cm	DNR	DNR	ST4041370923	18/06/2020	3
67	2670	high_ground	Natural Bank	80.29	right	5.60	+/->75cm	6.20	+/->75cm	DNR	DNR	ST4027269789	04/11/2019	3
68	2671	high_ground	Natural Bank	328.33	right	7.10	+/->75cm	5.60	+/->75cm	DNR	DNR	ST4035069806	04/11/2019	3
69	2672	high_ground	Rock Lined Channel + Earth Bank	42.18	right	6.09	+/- 1 to 5cm	5.97	+/- 1 to 5cm	DNR	DNR	ST4141970065	04/11/2019	3
70	2792	high_ground	Natural Bank	33.02	left	6.04	+/->75cm	6.20	+/->75cm	DNR	DNR	ST4151370017	04/11/2019	4
73	2796	high_ground	Natural Bank	130.11	left	5.84	+/->75cm	6.24	+/->75cm	DNR	DNR	ST3943370540	18/06/2020	2
74	2847	high_ground	Natural Bank	230.10	right	7.13	+/->75cm	5.78	+/->75cm	DNR	DNR	ST3936870610	18/06/2020	3
75	2848	high_ground	Natural Bank	115.04	right	5.74	+/->75cm	5.42	+/->75cm	DNR	DNR	ST3969970566	18/06/2020	3
76	2916	high_ground	Gabion Wall	41.68	right	5.42	+/->75cm	5.73	+/->75cm	DNR	DNR	ST3977470584	18/06/2020	3
77	2917	high_ground	Natural Bank With Timber Posts	67.80	right	5.95	+/->75cm	5.58	+/->75cm	DNR	DNR	ST3988570604	18/06/2020	3
78	2918	high_ground	Natural Bank	166.64	right	5.58	+/->75cm	5.77	+/->75cm	DNR	DNR	ST4002070564	18/06/2020	3
80	3329	high_ground	Natural Bank	274.13	right	6.10	+/->75cm	5.64	+/->75cm	DNR	DNR	ST4331770190	22/02/2021	3
81	3330	high_ground	Natural Bank	485.06	left	5.20	+/->75cm	4.60	+/->75cm	DNR	DNR	ST4378270571	04/06/2019	3
82	3379	high_ground	Natural Bank	717.11	right	5.17	+/->75cm	4.80	+/->75cm	DNR	DNR	ST4367170561	04/06/2019	3
86	3382	high_ground	Natural Bank	56.97	left	5.10	+/->75cm	5.10	+/->75cm	DNR	DNR	ST4222269823	04/11/2019	3
87	3383	high_ground	Flood Bank	425.07	left	7.87	+/->75cm	7.41	+/->75cm	DNR	DNR	ST4242569784	04/11/2019	3
88	3384	high_ground	Bridge Abutment	76.92	right	5.47	+/- 1 to 5cm	5.27	+/- 1 to 5cm	DNR	DNR	ST4143170053	04/11/2019	2
89	3385	high_ground	Natural Bank	394.81	right	6.83	+/->75cm	6.75	+/->75cm	DNR	DNR	ST4245169815	04/11/2019	3
90	3497	high_ground	Bridge Abutment (revetment)	16.44	right	5.17	+/->75cm	5.17	+/->75cm	DNR	DNR	ST4224169854	04/11/2019	2
91	3498	high_ground	Natural Bank	236.45	left	6.57	+/->75cm	6.80	+/->75cm	DNR	DNR	ST4267069790	26/06/2019	2
92	3503	high_ground	Natural Bank	220.90	right	6.35	+/->75cm	6.20	+/->75cm	DNR	DNR	ST4253071070	26/06/2019	2
93	3504	high_ground	Natural Bank	204.74	right	5.81	+/->75cm	6.15	+/->75cm	DNR	DNR	ST4017670727	18/06/2020	2
94	3505	high_ground	Gabion Wall	114.07	right	6.15	+/->75cm	6.25	+/->75cm	DNR	DNR	ST4022570804	18/06/2020	2
95	4866	wall	SEA WALLS - Clevedon North 2	28.85	coastal	DNR	DNR	DNR	DNR	8.92	+/->75 to 75cm	ST3987271188	30/07/2020	2
96	3499	high_ground	Natural Bank	714.25	right	6.66	+/->75cm	6.50	+/->75cm	DNR	DNR	ST4259170488	26/06/2019	3
97	3500	high_ground	Abutment Wall	7.77	right	5.30	+/->75cm	5.30	+/->75cm	DNR	DNR	ST4259170516	26/06/2019	3
98	3501	high_ground	Natural Bank	377.03	right	6.34	+/->75cm	6.15	+/->75cm	DNR	DNR	ST4256070715	26/06/2019	3
99	3502	high_ground	Natural Bank	180.76	left	5.35	+/->75cm	5.06	+/->75cm	DNR	DNR	ST4264870045	26/06/2019	3
101	38573	high_ground	Natural Embankment	180.02	right	7.72	+/->75cm	5.50	+/->75cm	DNR	DNR	ST3923570239	04/11/2019	3
102	38574	high_ground	Natural Bank	679.89	left	7.50	+/->75cm	8.20	+/->75cm	DNR	DNR	ST4105569941	04/11/2019	3
103	38575	high_ground	Natural Bank	361.68	right	5.18	+/->75cm	5.74	+/->75cm	DNR	DNR	ST4018669816	04/11/2019	3
104	38576	high_ground	M5 Bridge Abutment	62.04	left	5.46	+/->75cm	5.53	+/->75cm	DNR	DNR	ST4141870038	04/11/2019	2
105	38577	high_ground	Conc Lined Cs Earth Flood Bank	19.36	right	5.99	+/- 1 to 5cm	6.50	+/- 1 to 5cm	DNR	DNR	ST4068569881	04/11/2019	3
106	38579	high_ground	Natural Earth Embankment	85.22	right	5.28	+/->75cm	5.88	+/->75cm	DNR	DNR	ST4324072580	01/03/2019	3
107	40041	wall	SEA WALLS Clevedon North 1	50.30	coastal	DNR	DNR	DNR	DNR	9.05	+/->75cm	ST3966571029	30/07/2020	3

Map Ref	Asset ID	Asset Type	Asset Description	Approx length (m)	Right or left bank	Actual fluvial downstream crest level (mAOD)	Actual fluvial downstream crest level accuracy	Actual fluvial upstream crest level (mAOD)	Actual fluvial upstream crest level accuracy	Actual fluvial coastal crest level (mAOD)	Actual fluvial coastal crest level accuracy	NGR	Most recent inspection	Overall condition
110	40958	high_ground	Natural Bank	164.61	left	5.12	+/->75cm	3.39	+/->75cm	DNR	DNR	ST4262070350	26/06/2019	3
111	40959	high_ground	Wall To Weir Structure	15.86	left	5.67	+/->75cm	5.67	+/->75cm	DNR	DNR	ST4255570901	26/06/2019	2
112	40960	high_ground	Natural Bank	222.71	left	5.80	+/->75cm	6.30	+/->75cm	DNR	DNR	ST4254671072	26/06/2019	2
113	40961	high_ground	Bridge Abutment	7.26	left	4.81	+/->75cm	4.81	+/->75cm	DNR	DNR	ST4285569765	22/02/2021	3
114	40962	high_ground	Natural Bank	182.08	right	4.70	+/->75cm	4.34	+/->75cm	DNR	DNR	ST4315569756	22/02/2021	3
118	40957	high_ground	Revetment	35.73	left	5.45	+/->75cm	6.04	+/->75cm	DNR	DNR	ST4148070030	04/11/2019	4
119	40963	high_ground	Natural Bank	320.72	right	4.80	+/->75cm	5.50	+/->75cm	DNR	DNR	ST4333069870	22/02/2021	3
126	41430	high_ground	Natural Earth Embankment	31.96	left	5.95	+/->75cm	6.23	+/->75cm	DNR	DNR	ST4105371186	18/06/2020	2
127	41431	high_ground	Natural Bank	62.71	left	6.19	+/->75cm	5.86	+/->75cm	DNR	DNR	ST4221371324	18/06/2020	3
128	41435	embankment	Embankment	190.23	left	6.31	+/->75cm	5.85	+/->75cm	DNR	DNR	ST4233971278	01/04/2021	5
129	41436	embankment	Natural Bank	41.22	left	5.80	+/->75cm	5.86	+/->75cm	DNR	DNR	ST4291971323	01/04/2021	3
130	41437	high_ground	Bridge Abutment	2.99	left	5.61	+/->75cm	5.66	+/->75cm	DNR	DNR	ST4327271314	01/04/2021	2
133	41432	high_ground	Bridge Abutment	6.82	right	5.75	+/->75cm	5.65	+/->75cm	DNR	DNR	ST4327171321	01/04/2021	3
139	41554	high_ground	Natural Bank	187.12	left	6.24	+/->75cm	5.76	+/->75cm	DNR	DNR	ST3953370516	18/06/2020	2
140	41555	high_ground	Natural Bank	81.25	right	5.73	+/->75cm	5.95	+/->75cm	DNR	DNR	ST3983570576	18/06/2020	2
141	41556	high_ground	Gabion Bank	53.93	right	5.77	+/->75cm	5.81	+/->75cm	DNR	DNR	ST4008870578	18/06/2020	2
142	41557	high_ground	Walled channel	64.50	right	5.45	+/->75cm	6.25	+/->75cm	DNR	DNR	ST4055671087	18/06/2020	2
143	41668	high_ground	Blockwork Wall	20.13	right	5.99	+/- 1 to 5cm	5.99	+/- 1 to 5cm	DNR	DNR	ST4059271065	18/06/2020	2
144	41669	high_ground	Natural Bank	129.26	left	5.45	+/->75cm	5.78	+/->75cm	DNR	DNR	ST4021670762	18/06/2020	2
145	41670	high_ground	Masonry And Blockwork Building Wall	31.31	right	6.00	+/->75cm	5.80	+/->75cm	DNR	DNR	ST4087271106	18/06/2020	2
146	41675	high_ground	Concrete Wall	38.28	right	5.86	+/->75cm	6.07	+/->75cm	DNR	DNR	ST4144471290	18/06/2020	3
147	41676	high_ground	Embankment	287.02	right	5.71	+/->75cm	6.31	+/->75cm	DNR	DNR	ST4174771307	18/06/2020	3
148	54744	high_ground	Bridge Abutment	14.70	right	6.33	+/- 1 to 5cm	6.12	+/- 1 to 5cm	DNR	DNR	ST4067069880	04/11/2019	2
150	56705	high_ground	Earth Bank	712.64	right	6.60	+/->75cm	6.11	+/->75cm	DNR	DNR	ST4098069967	04/11/2019	3
151	41671	high_ground	Masonry Walls	94.70	right	5.50	+/->75cm	6.35	+/->75cm	DNR	DNR	ST4103371186	18/06/2020	2
152	41672	high_ground	Precast Concrete Revetment	27.45	left	6.07	+/->75cm	5.97	+/->75cm	DNR	DNR	ST4062571075	18/06/2020	3
153	41673	high_ground	Concrete Wall	15.77	left	6.05	+/->75cm	5.85	+/->75cm	DNR	DNR	ST4066071070	18/06/2020	2
154	41674	high_ground	Natural Bank	100.88	right	5.90	+/->75cm	6.17	+/->75cm	DNR	DNR	ST4122771230	18/06/2020	3
155	56706	high_ground	Natural Bank	232.51	right	5.75	+/->75cm	5.94	+/->75cm	DNR	DNR	ST4159370038	04/11/2019	3
156	56707	high_ground	Walled channel	67.11	left	5.45	+/->75cm	6.25	+/->75cm	DNR	DNR	ST4056271075	18/06/2020	2
158	58144	high_ground	Natural Bank	149.48	right	6.15	+/->75cm	6.40	+/->75cm	DNR	DNR	ST4254770910	26/06/2019	3
160	69274	cliff	Cliff	328.17	coastal	DNR	DNR	DNR	DNR	DNR	DNR	ST3999071495	16/03/2020	4
162	71247	high_ground	Retaining wall	112.70	coastal	DNR	DNR	DNR	DNR	DNR	DNR	ST3960371047	09/07/2012	2
163	71498	cliff	Cliff	1596.74	coastal	DNR	DNR	DNR	DNR	DNR	DNR	ST4040172294	06/05/2010	3
166	99466	high_ground	Natural Bank	414.74	right	5.70	+/->75cm	5.20	+/->75cm	DNR	DNR	ST4247871297	01/04/2021	3
167	71246	cliff	Cliff	834.57	coastal	DNR	DNR	DNR	DNR	DNR	DNR	ST3942370956	06/05/2010	3
168	99467	high_ground	Natural Bank	338.79	right	6.05	+/->75cm	6.10	+/->75cm	DNR	DNR	ST4343371332	01/04/2021	3
169	99468	high_ground	Natural Bank	165.42	left	0.00	DNR	6.08	+/->75cm	DNR	DNR	ST4188971292	18/06/2020	2
170	100002	high_ground	Natural Bank	467.10	right	6.25	+/->75cm	6.20	+/->75cm	DNR	DNR	ST4041370930	18/06/2020	3
171	100458	embankment	Natural Bank	381.20	left	5.85	+/->75cm	5.70	+/->75cm	DNR	DNR	ST4277471319	01/04/2021	5
173	100545	high_ground	Natural Bank	277.91	left	5.80	+/->75cm	5.75	+/->75cm	DNR	DNR	ST3995470569	18/06/2020	3
174	100546	high_ground	Natural Bank	144.54	left	6.11	+/->75cm	5.45	+/->75cm	DNR	DNR	ST4014770654	18/06/2020	2

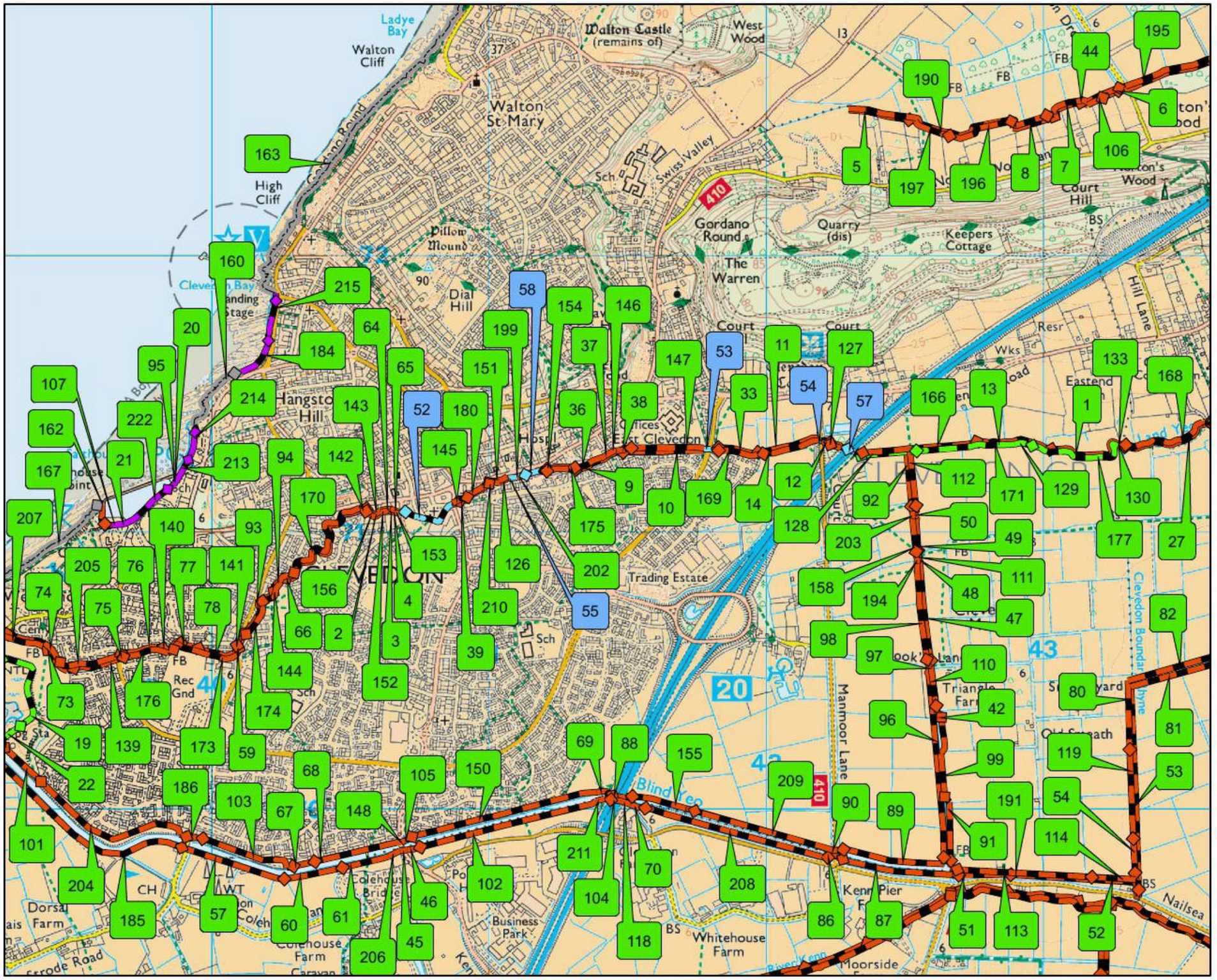
Map Ref	Asset ID	Asset Type	Asset Description	Approx length (m)	Right or left bank	Actual fluvial downstream crest level (mAOD)	Actual fluvial downstream crest level accuracy	Actual fluvial upstream crest level (mAOD)	Actual fluvial upstream crest level accuracy	Actual fluvial coastal crest level (mAOD)	Actual fluvial coastal crest level accuracy	NGR	Most recent inspection	Overall condition
175	101260	high_ground	Natural Bank	102.15	left	5.90	+/->75cm	6.35	+/->75cm	DNR	DNR	ST4123471227	18/06/2020	2
176	100003	high_ground	Natural Bank	190.42	left	5.76	+/->75cm	5.80	+/->75cm	DNR	DNR	ST3978970576	18/06/2020	3
177	100457	embankment	Embankment	399.91	left	5.86	+/->75cm	5.67	+/->75cm	DNR	DNR	ST4312571270	01/04/2021	3
180	112453	high_ground	Masonry Walls	94.50	right	5.80	+/->75cm	6.40	+/->75cm	DNR	DNR	ST4092871129	18/06/2020	3
184	115553	wall	Seawall - Clevedon North 5	184.48	coastal	DNR	DNR	DNR	DNR	9.47	+/- 1 to 5cm	ST4018371630	30/07/2020	2
185	116342	high_ground	Natural Bank	820.86	left	8.46	+/->75cm	5.85	+/->75cm	DNR	DNR	ST3968369839	04/11/2019	3
186	116343	high_ground	Concrete Grouted Blockstone Revetment	60.56	right	5.73	+/->75cm	5.74	+/->75cm	DNR	DNR	ST3992169895	04/11/2019	3
189	117722	high_ground	Earth Bank Farm Land	1800.44	right	4.82	+/->75cm	6.33	+/->75cm	DNR	DNR	ST4422772951	01/03/2019	3
190	117723	high_ground	Natural Bank	809.11	left	5.97	+/->75cm	6.20	+/->75cm	DNR	DNR	ST4270372432	01/03/2019	3
191	118674	high_ground	Natural Bank	486.79	right	5.50	+/->75cm	4.70	+/->75cm	DNR	DNR	ST4268969783	22/02/2021	3
194	119235	high_ground	Wall To Weir Structure	19.00	right	5.70	+/->75cm	5.70	+/->75cm	DNR	DNR	ST4255070899	26/06/2019	2
195	119270	high_ground	Natural Bank	477.82	left	5.67	+/->75cm	5.66	+/->75cm	DNR	DNR	ST4354672688	01/03/2019	3
196	129108	high_ground	Natural Earth Embankment	244.24	right	5.79	+/->75cm	5.64	+/->75cm	DNR	DNR	ST4276272458	01/03/2019	3
197	129109	high_ground	Natural Earth Embankment	162.92	right	5.64	+/->75cm	5.66	+/->75cm	DNR	DNR	ST4255772467	01/03/2019	3
199	142214	high_ground	Natural bank	5.07	right	DNR	DNR	DNR	DNR	DNR	DNR	ST4110971202	18/06/2020	2
202	143754	high_ground	Natural	6.09	left	DNR	DNR	DNR	DNR	DNR	DNR	ST4111171199	18/06/2020	2
203	153834	high_ground	Bridge Abutment Wall	18.51	right	5.80	+/->75cm	5.80	+/->75cm	DNR	DNR	ST4253571059	26/06/2019	3
204	153835	high_ground	Natural Bank With Access Track	630.48	right	5.50	+/->75cm	5.73	+/->75cm	DNR	DNR	ST3965669894	04/11/2019	3
205	162017	high_ground	Natural Bank	230.70	right	5.81	+/->75cm	5.74	+/->75cm	DNR	DNR	ST3950870521	18/06/2020	3
206	163282	high_ground	Natural Bank	44.71	left	6.12	+/->75cm	7.05	+/->75cm	DNR	DNR	ST4064069830	04/11/2019	4
207	163283	high_ground	Natural Bank	224.41	left	6.54	+/->75cm	5.84	+/->75cm	DNR	DNR	ST3925170622	18/06/2020	3
208	166189	high_ground	Flood Bank	685.40	left	7.30	+/->75cm	8.04	+/->75cm	DNR	DNR	ST4164469983	04/11/2019	4
209	166190	high_ground	Natural Bank	539.22	right	6.83	+/->75cm	6.75	+/->75cm	DNR	DNR	ST4172370000	04/11/2019	2
210	162018	high_ground	Masonry Wall	63.10	left	5.50	+/->75cm	5.95	+/->75cm	DNR	DNR	ST4102271181	18/06/2020	3
211	162770	high_ground	Revetment	31.41	left	5.41	+/->75cm	5.25	+/->75cm	DNR	DNR	ST4138970029	04/11/2019	3
213	168272	wall	Seawall - Clevedon North 3	119.33	coastal	DNR	DNR	DNR	DNR	8.92	+/->75cm	ST3989171215	30/07/2020	2
214	168273	wall	Seawall - Clevedon North 4	101.52	coastal	DNR	DNR	DNR	DNR	8.92	+/->75cm	ST3994471375	30/07/2020	3
215	168274	wall	Seawall - Clevedon North 6	150.23	coastal	DNR	DNR	DNR	DNR	9.39	+/- 1 to 5cm	ST4022871812	30/07/2020	2
222	170489	wall	Seawall - West Leaze	230.45	coastal	DNR	DNR	DNR	DNR	10.47	+/- 1 to 5cm	ST3976871091	30/07/2020	2
52	1413	simple_culvert	Culvert Side	237.40		DNR	DNR	DNR	DNR	DNR	DNR	ST4082071038	18/06/2020	2
53	1438	simple_culvert	Culvert Wall	25.00		DNR	DNR	DNR	DNR	DNR	DNR	ST4177671301	18/06/2020	1
54	1441	simple_culvert	Culvert - 1.5m dia concrete pipe	30.23		DNR	DNR	DNR	DNR	DNR	DNR	ST4218371336	18/06/2020	4
55	1545	simple_culvert	Culvert Side Wall (armco)	46.61		DNR	DNR	DNR	DNR	DNR	DNR	ST4106971197	24/11/2020	3
57	41434	simple_culvert	Culvert Wall	53.68		DNR	DNR	DNR	DNR	DNR	DNR	ST4227371308	04/11/2019	3
58	142213	simple_culvert	Culvert	81.39		DNR	DNR	DNR	DNR	DNR	DNR	ST4111071202	24/11/2020	4

Notes

* Overall Condition has been taken from the most recent inspection
* Inspections are of a purely visual nature and do not necessarily reflect the true condition of the asset
* Condition 1 = very good, Condtion 2 = good, Condition 3 = fair, Condition 4 = poor, Condition 5 = very poor

DNR = data not recorded

Current Flood Defences centred on 88 Teignmouth Road, Clevedon BS21 6DR ST 41385 71135
created 15/04/2021 Ref: 211530-WX



Environment Agency

Scale: 1:20,000

N
W E
S

Legend

Defences

- bridge_abutment
- barrier_beach
- cliff
- demountable
- embankment
- flood_gate
- high_ground
- promenade
- quay
- wall
- beach
- dunes

Channels

- open_channel
- simple_culvert

This data has been extracted from the Asset Information Management System (AIMS) which was created to draw various data sources into one database and has been populated with information of varying quality.

Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

TITLE Clevedon Flood Mapping Study - JBA 2012
MODEL DATE 01/10/2012
SOFTWARE ISIS-TUFLOW

SCENARIO Baseline

NODE	LAND_2769	LAND_2834	LAND_2933	LAND_3026D	LAND_3075	LAND_3125	LAND_3180D	LAND_3216	LAND_3299	LAND_3398
WATERCOURSE	Land Yeo	Land Yeo	Land Yeo	Land Yeo	Land Yeo	Land Yeo	Land Yeo	Land Yeo	Land Yeo	Land Yeo
2YR Level	4.87	4.88	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93
2YR Flow	0.83	0.63	0.63	0.63	0.64	0.64	0.64	0.64	0.65	0.66
5YR Level	4.96	4.96	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98
5YR Flow	1.00	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.73
10YR Level	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01
10YR Flow	1.10	0.75	0.75	0.75	0.76	0.75	0.75	0.75	0.75	0.76
20YR Level	5.05	5.04	5.04	5.05	5.05	5.05	5.05	5.05	5.05	5.05
20YR Flow	1.19	0.77	0.77	0.77	0.77	0.77	0.77	0.78	0.79	0.80
20YR 20%CC Level	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
20YR 20%CC Flow	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
25YR Level	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
25YR Flow	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
30YR Level	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
30YR Flow	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
50YR Level	5.11	5.11	5.10	5.10	5.10	5.10	5.10	5.10	5.10	5.10
50YR Flow	1.30	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.82	0.83
75YR Level	5.13	5.13	5.13	5.13	5.13	5.13	5.13	5.13	5.13	5.13
75YR Flow	1.35	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.83	0.84
100YR Level	5.15	5.15	5.14	5.15	5.15	5.15	5.15	5.14	5.14	5.14
100YR Flow	1.39	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.83	0.85
100YR 20%CC Level	5.23	5.23	5.21	5.21	5.21	5.21	5.21	5.21	5.21	5.22
100YR 20%CC Flow	1.52	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.85	0.87
100YR 30%CC Level	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
100YR 30%CC Flow	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
100YR 40%CC Level	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
100YR 40%CC Flow	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
100YR 85%CC Level	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
100YR 85%CC Flow	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD

211530-WX selected nodes data extract

200YR Level	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
200YR Flow	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
200YR 20%CC Level	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
200YR 20%CC Flow	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
500YR Level	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
500YR Flow	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
1000YR Level	5.38	5.38	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35
1000YR Flow	1.73	0.85	0.85	0.85	0.85	0.84	0.84	0.84	0.85	0.86
1000YR 20%CC Level	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
1000YR 20%CC Flow	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
TIDE 200YR	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
TIDE 1000YR	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD	NMD
Eastings	341042	341104	341199	341289	341339	341383	341429	341465	341548	341647
Northings	171185	171202	171224	171232	171235	171257	171277	171293	171296	171298

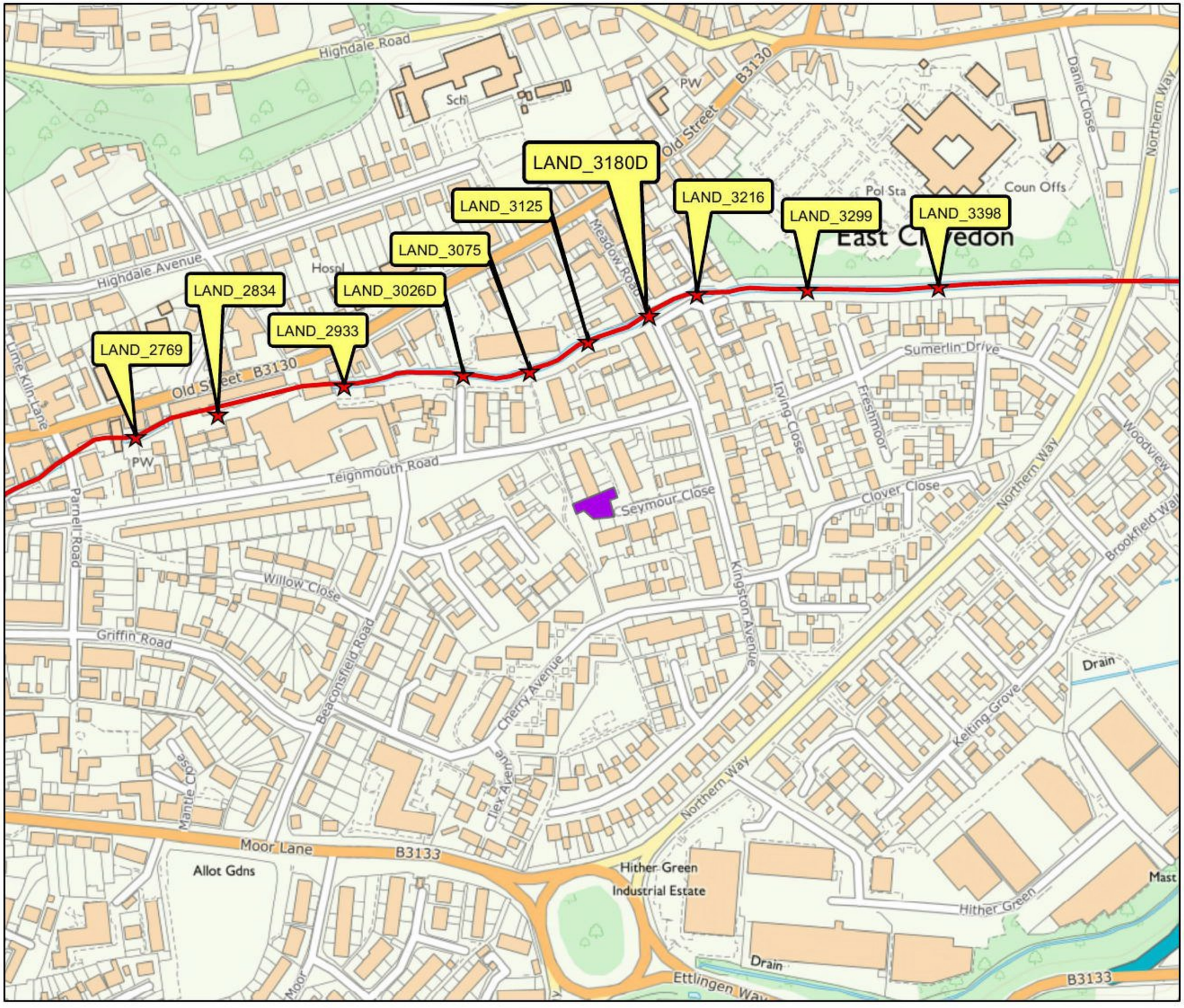
Level of confidence **Moderate**

The model was produced to assess our flood risk management assets and the results are fit for this purpose.
We have MODERATE confidence in its input data, and subsequently its results. The reason that we have MODERATE confidence in the model and its results is because the model requires verification against a known flood event. You will need to contact our Partnership and Strategic Overview Team to discuss whether the flood levels from this model are suitable for your FRA or whether they require you to carry out further work to update the modelling.

NMD No Modelled Data

UNITS
LEVELS: mAOD
FLOW: cumecs

Node location map centred on ST 41386 71135 - created 12/04/2021 [Ref: 211530-WX]



Environment Agency

Scale:1:4,000 at A3

N W E S

Legend

NODE_TYPE

- 1D_RiverSection
- 2D_RiverSection
- Interpolate
- Replicate
- Reservoir

211530-WX_site_boundary

Main Rivers

Modelled Flood Level Nodes

A table that references the node locations/unique identifiers is also attached, giving associated flood levels, NGRs and further information for the river channel and model.