

FLOOD RISK ASSESSMENT



**CLEATOR MOOR ACTIVITY CENTRE, WYNDHAM STREET,
CLEATOR MOOR, CUMBRIA, CA25 5AN
PREPARED FOR ALLIANCE LEISURE SERVICES LIMITED**



QUALITY CONTROL

Project No.	GEOL22-8472	Client	Alliance Leisure Services Limited
Design Team	Cohesion Consult Limited, Furness Partnership Limited & Roberts Limbrick Limited		
Report Type	Flood Risk Assessment		
Project Type	Proposed construction of new activity centre		
Site Address	Cleator Moor Activity Centre, Wyndham Street, Cleator Moor, Cumbria, CA25 5AN		
NGR	302150, 515090		
Date	22/04/2023		
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REPORT REVISION HISTORY				
Issue	Description	Date	Author	Approval
1	Final Issue	22/04/2023	RS	TMc

TABLE OF CONTENTS

1.0 INTRODUCTION	PAGE 3
2.0 SITE DETAILS & DESCRIPTION	PAGE 4
3.0 GROUND CONDITIONS, HYDROGEOLOGY & HYDROLOGY	PAGE 5
4.0 POTENTIAL SOURCES OF FLOOD RISK	PAGE 8
5.0 FLOOD RISK ASSESSMENT	PAGE 10
6.0 CONCLUSIONS	PAGE 11

APPENDIX I	EXISTING SITE PLAN, PROPOSED DEVELOPMENT LAYOUT PLAN AND SITE PHOTOGRAPHS
APPENDIX II	LANDMARK INFORMATION GROUP, FLOOD SCREENING REPORT

FLOOD RISK ASSESSMENT

1.0 Introduction

Geol Consultants Limited (GEOL) were instructed by Furness Partnership on behalf of Alliance Leisure Services Limited to undertake a site-specific Flood Risk Assessment (FRA) to facilitate the construction of a new Activity Centre on land north of Wyndham Street located in the town of Cleator Moor in Cumbria. A copy of the proposed development layout plan can be seen on the Roberts Limbrick Limited drawing, in Appendix I.

As part of this FRA, a reconnaissance (walkover) survey was undertaken which involved an inspection of the site and immediate surrounding area. Site photographs taken during this survey can be seen in Appendix I and all relevant observations are noted in the Site Details & Description section on the following page.

The purpose of this FRA report is to provide information relating to the following.

- ▼ Determine the flood risk zone(s) for the site, in accordance with current Environment Agency (EA) flood risk mapping
- ▼ Identify and assess the potential sources of flood risk that could affect the site and proposed development
- ▼ Determine where the future development can be designed to minimise the risks from flooding, including the application of the Sequential Test and Exception Test (if required)
- ▼ Assess the impact of the proposed development on flood risk to the surrounding area, including any adverse impact on watercourses, floodplains and potential flood storage capacity
- ▼ Present a concept surface water drainage management plan for the proposed development to demonstrate that surface water discharge volumes and rates can be managed in an acceptable manner, including future foul drainage
- ▼ Assess if the future development will impede access to flood defences or management facilities

A review of currently available information from the following information and data sources has been undertaken to assist in the completion of this technical report.

- ▼ National Planning Policy Framework (NPPF), February 2019; Section 14 Paragraphs 155 to 165
- ▼ Technical Guidance to the NPPF, March 2012
- ▼ DEFRA / Environment Agency (EA); Flood Risk Assessment Guidance for New Development, Phase 2 Framework and Guidance for Assessing and Managing Flood Risk for New Development – Full Documentation and Tools, R&D Technical Report FD2320/TR2, October 2005
- ▼ Environment Agency (EA) / GOV.UK; Flood map for planning, Long term flood risk information interactive map and Preparing a flood risk assessment: standing advice
- ▼ CIRIA Report C624; Development and flood risk – guidance for the construction industry

FLOOD RISK ASSESSMENT

1.0 Introduction (Cont'd)

- ▼ BS8533:2017; Assessing and managing flood risk in development- code of practice
- ▼ British Geological Survey (BGS); geological maps
- ▼ Landmark Information Group; Flood Screening Report (FSR)

2.0 Site Details & Description

All relevant details and descriptions relating to the site have been summarised in the Table below and on the following page.

Detail	Description
Site address and access	Cleator Moor Activity Centre, Wyndham Street, Cleator Moor, Cumbria, CA25 5AN
NGR	302150, 515090
Approximate size	c.0.53 Ha
Current site use	The site area is currently occupied by two buildings which form an existing Activity Centre. Car parking comprising mainly gravel surfacing occupies the western part of the site. Soft landscaping is present in the north of the site and this area was noted to be soft under foot during the reconnaissance (walkover) survey completed by GEOL during June 2022. Tarmacadam and block paving also make up some of the other areas of hardstanding across the site
Proposed site use	The existing buildings are to be demolished to make way for a large new building (Activity Centre) to be constructed on a similar footprint as the existing. New car parking is also proposed for the remaining parts of the site
Surrounding land uses	The site is located within the town of Cleator Moor with a mixture of residential and commercial properties located to the northwest, southwest and southeast of the site. An artificial sports pitch is located to the north of the existing activity centre, and undeveloped / agricultural land is located to the northeast
Site topography & current site levels	The site area is generally flat with a ground level of around 85m AOD
Future site levels	Site levels are likely to remain similar to existing ground levels in the area of the proposed new activity centre
Existing & proposed areas of positive surface runoff	The whole of the site area covers an area of 5,300m², which currently comprises a mixture of existing building footprints, unsurfaced and tarmacadam surfaced areas of carparking and soft landscaping. The existing activity centre is expected to be serviced by an existing surface water and foul drainage system, which presumably discharges offsite into the public sewer infrastructure. Across the remaining portions of the site, surface water is more than likely to infiltrate directly into the ground where grass / soft landscaping is present. The new activity centre development (comprising a new building footprint and surfaced carpark) will create an additional area of new impermeable surfacing of up to 1,762m², which will result in an increased volume and rate of surface water runoff from the new development that will need to be managed by a new surface water management system post development

FLOOD RISK ASSESSMENT

2.0 Site Details & Description (Cont'd)

Detail (Cont'd)	Description (Cont'd)
Existing & proposed areas of positive surface runoff (Cont'd)	Insitu falling head permeability tests have been carried out, however, due to the impermeable nature of the natural deposits (clay) there was no noticeable discharge of water recorded during the monitoring test period. As such, the tests indicate the natural deposits have a practically impermeable permeability classification and practically impervious drainage characteristics. Therefore the natural deposits will not be suitable for the direct discharge of surface water to the ground. Since there are no nearby surface water courses to allow discharge into, surface water will need to continue to be directed and discharged into the existing public sewer infrastructure. An appropriate drainage design strategy should accompany this FRA

3.0 Ground Conditions, Hydrogeology & Hydrology

3.1 Site Geology

No made ground / fill deposits are recorded on site in accordance with geological maps published by the BGS, reference; Sheet 28, Whitehaven, 1:50,000 scale, Bedrock and Superficial Edition, dated 2004. However, a large area of made ground is recorded close to the site, to the north-east where former quarrying activities have taken place at Aldby Quarry. Whilst significant made ground / fill deposits are not recorded below the site area on BGS maps, some made ground / disturbed deposits should be anticipated associated with the construction of the existing buildings and carparking present on site today.

The site is shown to be initially overlain by superficial (drift) deposits comprising Devensian Till formed up to 2 million years ago in the Quaternary Period. These deposits are expected to comprise firm and stiff, sandy, gravelly clay deposits containing occasional cobbles and boulders, and based on nearby archive BGS borehole records are anticipated to be around 5m in thickness before bedrock deposits are present.

The underlying bedrock deposits are complex due to localised faulting which crosses below the site, and are shown to comprise a mixture of the Buttermere Formation (mudstone and sandstone) formed approximately 466 to 485 million years ago in the Ordovician Period, the Frizington Limestone Formation formed approximately 337 to 343 million years ago in the Carboniferous Period and the Stainmore Formation (mudstone, siltstone, and mudstone) formed approximately 319 to 329 million years ago in the Carboniferous Period.

The Stainmore Formation is present below the northern part of the site, the Frizington Limestone Formation is present below the eastern part of the site and the Buttermere Formation is present below the southern part of the site.

FLOOD RISK ASSESSMENT

3.0 Ground Conditions, Hydrogeology & Hydrology (Cont'd)

3.2 Hydrogeology & Hydrology Setting

The Devensian Till deposits present below the site have been designated as a Secondary Undifferentiated Aquifer, with a low vulnerability classification. Secondary Undifferentiated Aquifers are aquifers where it has not been possible to attribute either category A or B to a deposit type. In most cases this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the deposit type.

The bedrock deposits present below the site have been designated as Secondary A & B Aquifers. These are permeable layers that can support local water supplies and may form an important source of base flow to rivers, and lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons, and weathering. These are generally the water-bearing parts of the former Non-Aquifers.

When considering the anticipated ground conditions recorded below the site, a shallow continuous groundwater surface is not expected. Deep groundwater is anticipated at depth within the solid geology. The site is not recorded within a Source Protection Zone (SPZ), nor any recorded within 1km of the site boundary.

There are no surface water courses recorded within 250m of the site boundaries.

3.3 Management of Existing Surface Water Discharges

The proposed development area covers 5,300m². It is presumed that the existing activity centre is serviced by an existing surface water and foul drainage system, which presumably discharges offsite into existing public sewer infrastructure, which is recorded onsite. Across the remaining portions of the site where grass / soft landscaping is present surface water is more than likely to infiltrate directly into the ground. A drainage survey should be undertaken to determine the capacity and current discharge rate of the existing sewer infrastructure.

3.4 Management of Future Surface Water Discharges

As part of a site-specific FRA consideration needs to be given to the control and discharge of surface water, particularly where positive surface water drainage management systems are required as part of the proposed development. It is recommended that surface water run-off will discharge to one of following listed in order of priority.

FLOOD RISK ASSESSMENT

3.0 Ground Conditions, Hydrogeology & Hydrology (Cont'd)

3.4 Management of Future Surface Water Discharges (Cont'd)

1. An adequate soakaway or infiltration system, or where the ground conditions do not permit this option
2. Discharge to a surface water course, at an equivalent greenfield run-off for the site and / or incorporating a 40% reduction in the discharge rate, or where this is not practically possible
3. Surface water will have to be discharged to the public sewer infrastructure system incorporating a 50% betterment on the discharge rate, and as such attenuation may be required to accommodate surface water storage

As a new development is proposed a new drainage infrastructure system will be required. The proposed area of new impermeable hardstanding and building footprint will create an additional area of new impermeable surfacing / building footprint of up to c.1,762m². As such this will result in an increase in the volume and rate of surface water runoff generated by the new development which will need to be managed by the new surface water management system. The ground conditions present below the site comprise made ground to depths of between 1.00m and 1.50m overlying firm and stiff sandy gravelly clay to depths of at least 5.45m. Insitu falling head permeability tests have been carried out on the site within the existing natural deposits present, however these displayed practically impermeable permeability classifications, and practically impervious drainage characteristics. As such, the underlying ground conditions appear not to be suitable for the use of traditional soakaways in accordance with the SuDS manual C753, i.e. direct discharge of surface water into the underlying ground.

Following the discharge hierarchy, there are no surface water features recorded within 250m of the site boundary, therefore discharge to an existing surface water course is not considered feasible for the proposed site development. As such, surface water from the new development would need to continue discharging into the existing public sewer infrastructure located below the site. The current volume and discharge rate of the existing infrastructure is unknown, however, consideration will need to be given to attenuation of the additional volumes of surface water as well as incorporating a 50% reduction in the discharge rate to reduce the burden on the existing public infrastructure and prevent it from becoming overwhelmed in the future. An appropriate drainage management plan / strategy should accompany this FRA report.

3.5 Current & Future Foul Drainage

United Utilities are responsible for the management of the foul sewer infrastructure in this area. When considering the current site, foul drainage from the existing activity centre is presumed to discharge into the existing onsite drainage infrastructure which ultimately discharges into the public sewer infrastructure recorded onsite.

FLOOD RISK ASSESSMENT

3.0 Ground Conditions, Hydrogeology & Hydrology (Cont'd)

3.5 Current & Future Foul Drainage (Cont'd)

A new foul drainage system will be required for the proposed new activity centre development which is likely to be directed to the existing foul sewer infrastructure present on site. Once the design scheme has been completed, a drainage management plan / strategy should accompany this FRA report.

4.0 Potential Sources of Flood Risk

4.1 Fluvial (River) Flood Zones

According to the EA / GOV.UK Flood Map for Planning Interactive Map, the site lies within a Flood Zone 1, an area with a low probability of flooding with <1 in 1000 chance of fluvial flooding occurring (<0.1%), and therefore this site is unlikely to be at significant risk from future flooding. As the site lies out with a flood risk area no modelled flood levels can be provided by the EA.

According to the EA / GOV.UK Long Term Flood Risk Information Interactive Map and the EA RoFRS map contained within the FSR, the whole of the site is shown to lie within an area at negligible risk of flooding, where the chance of flooding occurring is <0.1%. This considers the effect of any flood defences in the area. These defences reduce but do not completely stop the chance of flooding as they can be overtopped or fail.

The JBA flood maps indicate the whole of the site area is not at risk from the 75, 100, 200 and 1000 year fluvial flood events, and the BGS record the site to lie out with an area where there are potential geological indicators of flooding. The site is recorded to have a Low flood insurance claim rating.

4.2 Tidal (Sea) Flood Zone

The site does not lie in an area which is likely to flood from the sea (i.e. <1 in 1000 or <0.1% chance of happening), as the site is inland and is not close to a tidal river.

4.3 Pluvial (Surface Water) Flooding

According to the GOV.UK Long Term Flood Risk Information Interactive Map, the majority of the site area is shown to lie within an area at very low (<0.1%) risk of surface water (pluvial) flooding occurring. However the southern / southwestern boundary of the site is shown to lie within a high risk area where the chance of flooding is >3.3%. This lies outwith the proposed footprint of the new activity centre.

FLOOD RISK ASSESSMENT

4.0 Potential Sources of Flood Risk (Cont'd)

4.3 Pluvial (Surface Water) Flooding (Cont'd)

The EA surface water maps contained within the FSR concurs with the Long Term Flood Risk Information Interactive Map, where 1 in 30 (high), 1 in 100 (medium) and 1 in 1000 (low) year return events only exist along the southern / southwestern boundary of the site. The Surface Water Hazard Rating is generally recorded as low. The JBA flood data correlates with the EA data. During the reconnaissance (walkover) survey the soft landscaping to the north / northwest was noted to be soft under foot.

4.4 Flooding from Groundwater

According to BGS data, the whole of the site is shown to lie within an area with a limited potential for groundwater flooding to occur, and the Geosmart data indicates the site is at negligible risk from groundwater flooding occurring and any groundwater flooding incidence has a chance of less than 1 in 100 (<1%) probability of occurrence. When considering the anticipated ground conditions, it is unlikely that groundwater flooding would occur.

4.5 Flooding from Reservoirs, Canals and other Artificial Bodies

Non-natural or artificial sources of flooding can include reservoirs, canals and lakes where water is retained above natural ground level, operational and redundant industrial processes including mining, quarrying and sand and gravel extraction, as they may increase floodwater depths and velocities in adjacent areas. The potential effects of flood risk management infrastructure and other structures also need to be considered. Reservoir or canal flooding may occur as a result of the facility being overwhelmed and/or as a result of dam or bank failure. The site is not considered to be at risk from any artificial sources of flooding, including reservoirs, canals, lakes or the like.

4.6 Flooding from Sewers

The FSR has no data relating to the site or surrounding area is at risk from flooding from public sewers.

4.7 Flooding from Overland Flow & Adjacent Sites

When considering the topography of the site and surrounding area, it is likely that if overland flow of surface water were to occur, it would be generated from the land to the east / northeast.

As part of the proposed development, the site levels and drainage strategy should be designed to ensure that any overland flows resulting from new areas of hardstanding are directed away from proposed buildings in order to mitigate any risk of flooding from this source.

FLOOD RISK ASSESSMENT

4.0 Potential Sources of Flood Risk (Cont'd)

4.8 Historical Flooding

According to the FSR, there are no records of any historical flooding events affecting the site or the immediate surrounding area.

5.0 Flood Risk Assessment

5.1 Impact of Flooding on the Site & Proposed Development

From the review of data available for this site and the findings of this site-specific FRA, the site is not recorded to be at significant risk from fluvial flooding, with the site shown to lie within a Zone 1 flood risk area, where there is <1 in 1000 chance of fluvial flooding occurring (<0.1%). The EA / GOV.UK Long Term Flood Risk Information Interactive Map and the EA RoFRS map contained within the FSR, records the site to lie within an area at negligible risk of flooding, where the chance of flooding occurring is <0.1%. There is no historical data to suggest the site has been affected by past flooding events. The site area is not considered to be at potential risk from tidal flooding, groundwater flooding, flooding from artificial sources of water (reservoirs, canals, etc.) or public sewers.

In general the risk of pluvial flooding affecting the site is not considered to represent a risk, although the southern boundary of the site is shown to be at risk from localised high risk pluvial flooding (surface water), however this is not felt to represent a significant risk to future end users or the proposed development.

5.2 Flood Risk Vulnerability of the Proposed Development

The EA classifications for flood risk vulnerability are provided in the technical guidance document (March 2012) which accompanies the NPPF (2019). The end-use of the site will remain the same (i.e. leisure centre, and in accordance with Table 2 of the technical guidance, 2012, Flood Risk Vulnerability Classification, the proposed development has been defined as Less Vulnerable, and therefore this type of development is deemed appropriate in a Zone 1 flood risk area, without the requirement for the application of the Sequential or Exception Test. As such, no further risk assessment is required for this site or proposed development.

5.3 Impact of the Development on Flood Risk to the Surrounding Area, Watercourses and Flood Storage Capacity

When considering the proposed development, and the increase in new impermeable surfacing (new building footprint and surfaced area of carparking), it is felt that the site and proposed development could increase the flood risk elsewhere by increasing the volume and rate of surface water discharge required from this site.

FLOOD RISK ASSESSMENT

5.0 Flood Risk Assessment (Cont'd)

5.3 Impact of the Development on Flood Risk to the Surrounding Area, Watercourses and Flood Storage Capacity (Cont'd)

As such, appropriate surface water management will be required to reduce this potential risk, and to deal with the additional area of new impermeable surfacing (c.1,762m²).

At this stage it is not known how the existing site drainage is discharged, however considering the existing ground conditions it is presumed that this will discharge into the existing public sewer infrastructure. Consideration will need to be given to attenuation of the additional volumes of surface water generated by the proposed development as well as incorporating a 50% reduction in the discharge rate to reduce the burden on the public infrastructure. A new drainage strategy should accompany this proposed development meeting the criteria of the SuDS manual and the LLFA.

As the site and proposed development does not lie within a fluvial flood risk zone, the construction of the proposed activity centre development will not have the effect of increasing the depth of flooding to surrounding areas or by extending the floodplain to impact properties normally outside of the floodplain.

5.4 Impact of the Development on Flood Defences or Management Facilities

There are no known EA or private flood defences recorded on the site or within the surrounding area. Therefore, the proposed development will not result in a loss of access to any surface watercourses or any known existing or proposed flood defences maintained by the EA or the local flood authority, and as such the proposed development will not have an adverse impact on the operation or maintenance of existing flood defences or management facilities in this area.

6.0 Conclusions

As can be seen from the results of this site-specific FRA, the whole of the site and the proposed development are not considered to be at significant risk from fluvial flooding. The site lies wholly within a Zone 1 flood risk area and is considered to have a <0.1% chance of fluvial (rivers) flooding (less than 1 in 1000 chance of flooding in a year). The site is also not considered to be at risk from tidal flooding, flooding from artificial sources of water (reservoirs, canals, etc.), groundwater flooding or flooding from public sewers, and there are no records of any historical flooding.

In general the site is not shown to be affected by significant pluvial (surface water) flooding, however the proposed development will comprise new areas of impermeable surfacing from new building footprints and carparking (c.1,762m²) therefore new surface water drainage infrastructure should be designed to accommodate surface water discharges for various storm events / durations.

FLOOD RISK ASSESSMENT

6.0 Conclusions (Cont'd)

The site / proposed development lies within a Zone 1 flood risk area and therefore passes the Sequential Test on both a strategic and site-specific basis. The proposed end use of this development is commercial / leisure and would be classified as Less Vulnerable (Flood Risk Vulnerability Classification - Table 2, NPPF TG), and therefore would be considered as an appropriate end use for a Zone 1 flood risk area, without requiring application of the Exception Test.

This site and proposed development could increase the flood risk elsewhere by increasing the volume and rate of surface water discharge due to the new increase in hardstanding and building footprints covering an additional undeveloped area of c.1,762m², therefore there will be a need to incorporate new surface water drainage infrastructure to deal with the additional volume and increased rate of surface water generated by the new development. Once the design scheme has been completed, a drainage management plan / strategy should accompany this FRA report.

Given the use of an appropriate drainage strategy, the development will not have an adverse impact on any nearby watercourses, floodplains and areas of flood storage capacity, nor will the development result in flooding of adjacent sites.

End of Report

APPENDIX I

Existing Site Plan Proposed Development Layout Plan & Site Photographs



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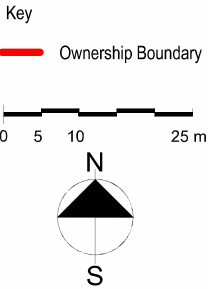
EXISTING SITE LAYOUT PLAN



Report Type: Flood Risk Assessment

Site Address: Cleator Moor Activity Centre, Cleator Moor, Cumbria, CA25 5AN

Project No.: GEOL22-8472



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Rev	Date	By	Chk	Description
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Client Name
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Drawing Title
Proposed Site Plan

Scale	Project No.
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Status	Purpose Of Issue
A3	Issued for Planning

Project	Org	Vol	Level	Form	Role
10319	RL	XX	ZZ	DR	A

Number	Revision
P2002	



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 SITE PHOTOGRAPHS

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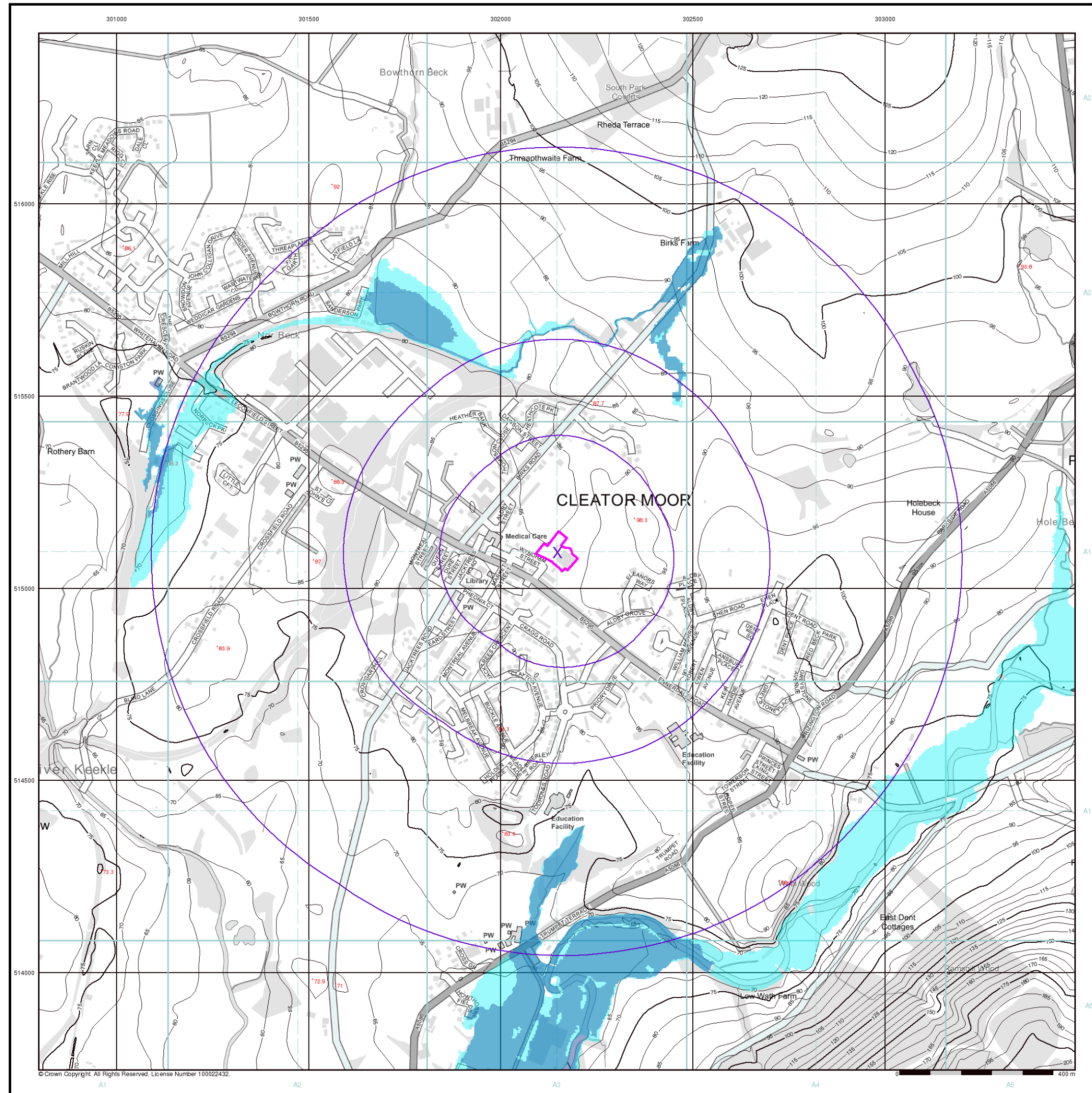
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APPENDIX II

Landmark Information Group, Flood Screening Report



EA/NRW Flood Data Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

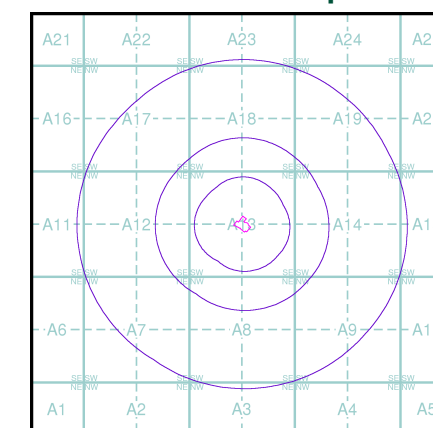
Flood Data

- Extreme Flooding from Rivers or Sea without Defences (Zone 2)
- Flooding from Rivers or Sea without Defences (Zone 3)
- Area Benefiting from Flood Defence
- Flood Water Storage Areas
- Flood Defence

Contours (height in metres)

- Standard Contour
- Master Contour
- Spot Height
- MLW Mean Low Water
- MHW Mean High Water

EA/NRW Flood Data Map - Slice A



Order Details

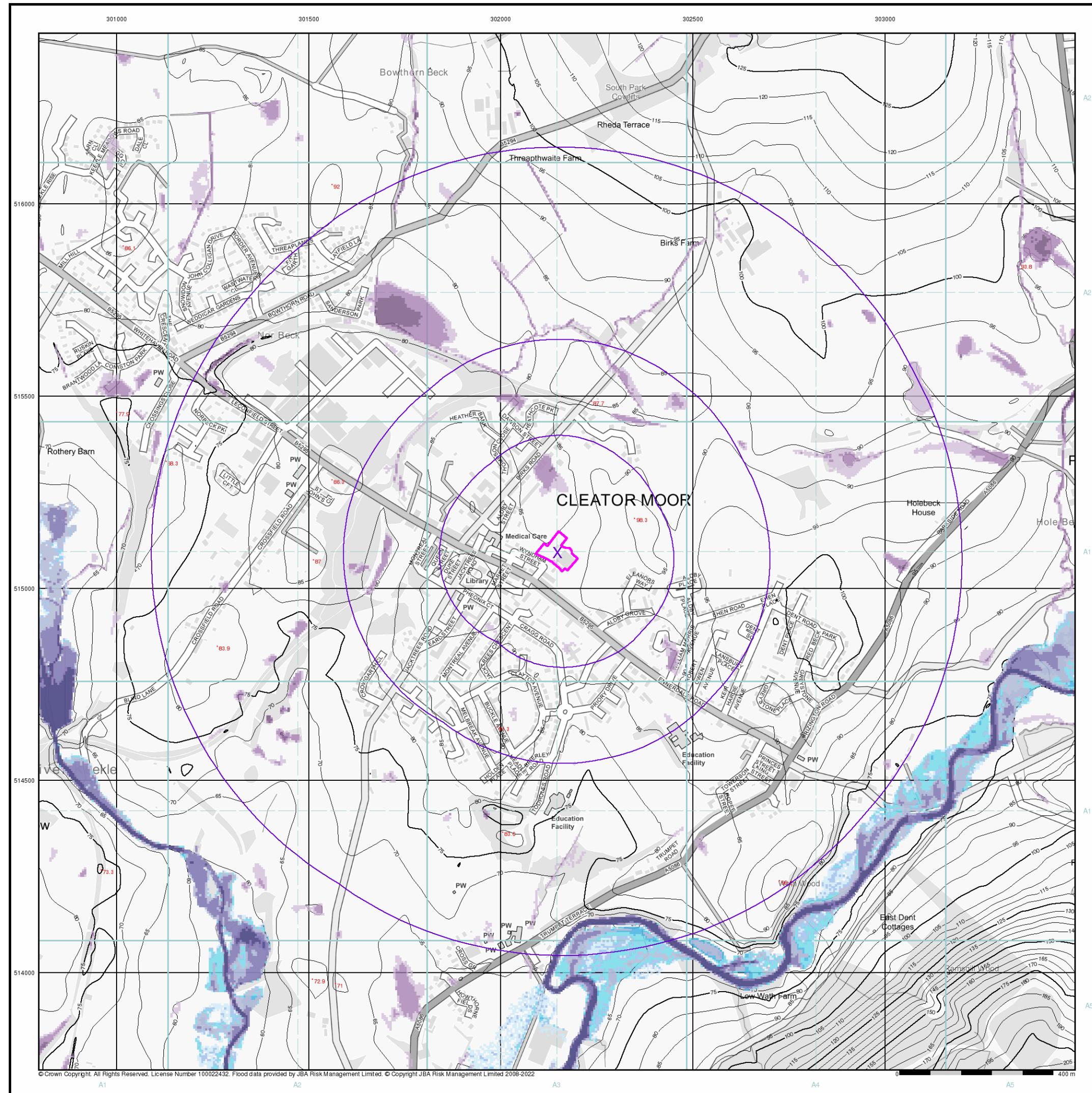
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN



Tel: 0844 844 9952
Fax: 0844 844 9951
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JBA 75 Year Return Flood Map (Un defended) (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

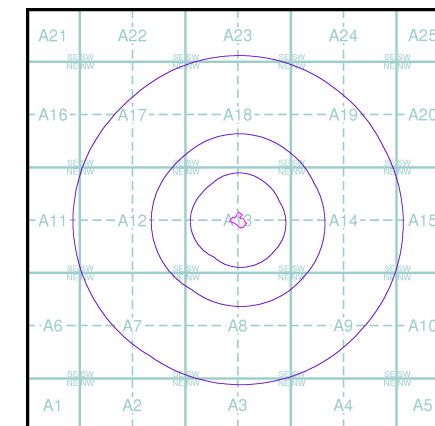
Modelled Flood Depth

Pluvial Depth	Fluvial Depth	Coastal Depth
0.1m	0.01m - 0.05m	0.01m - 0.05m
0.1m - 0.3m	0.05m - 0.1m	0.05m - 0.1m
0.3m - 1m	0.1m - 0.3m	0.1m - 0.3m
>1m	0.3m - 1m	0.3m - 1m
	>1m	>1m

Contours (height in metres)

- Standard Contour
- Master Contour
- Spot Height
- MLW Mean Low Water
- MHW Mean High Water

JBA 75 Year Return Flood Map (Un defended) - Slice A



Order Details

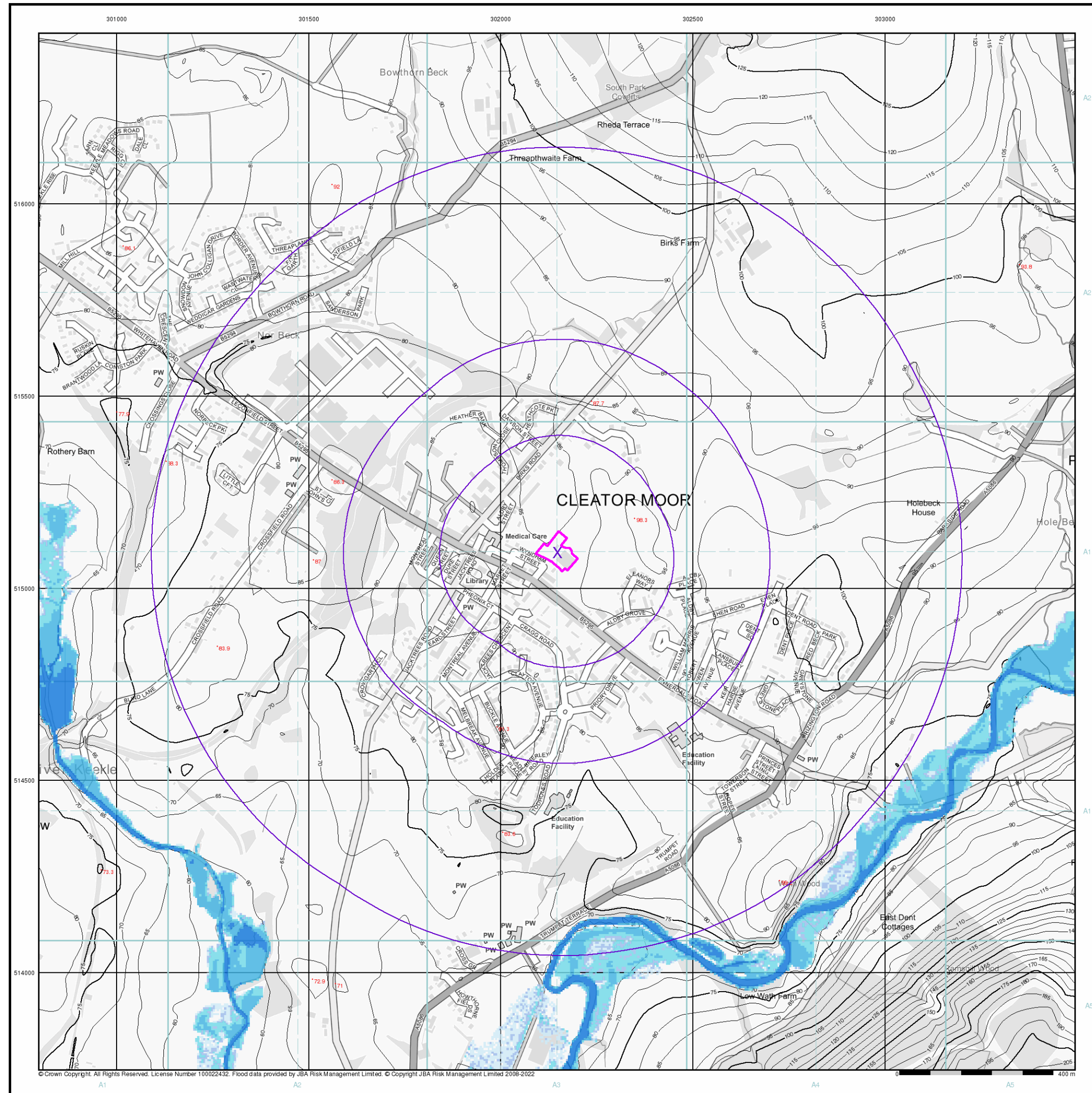
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

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CA25 5AN



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JBA 100 Year Return Flood Map (Un defended) (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

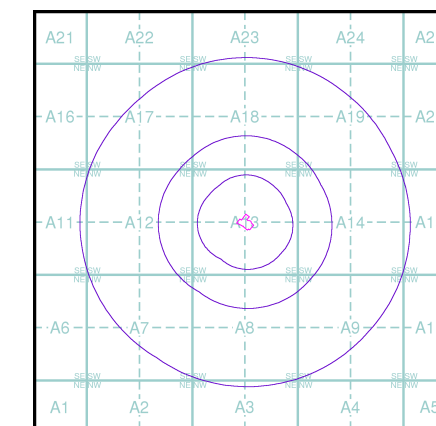
Modelled Flood Depth

Fluvial Depth	Coastal Depth
0.01m - 0.05m	0.01m - 0.05m
0.05m - 0.1m	0.05m - 0.1m
0.1m - 0.3m	0.1m - 0.3m
0.3m - 1m	0.3m - 1m
>1m	>1m

Contours (height in metres)

- Standard Contour
- Master Contour
- Spot Height
- MLW Mean Low Water
- MHW Mean High Water

JBA 100 Year Return Flood Map (Un defended) - Slice A



Order Details

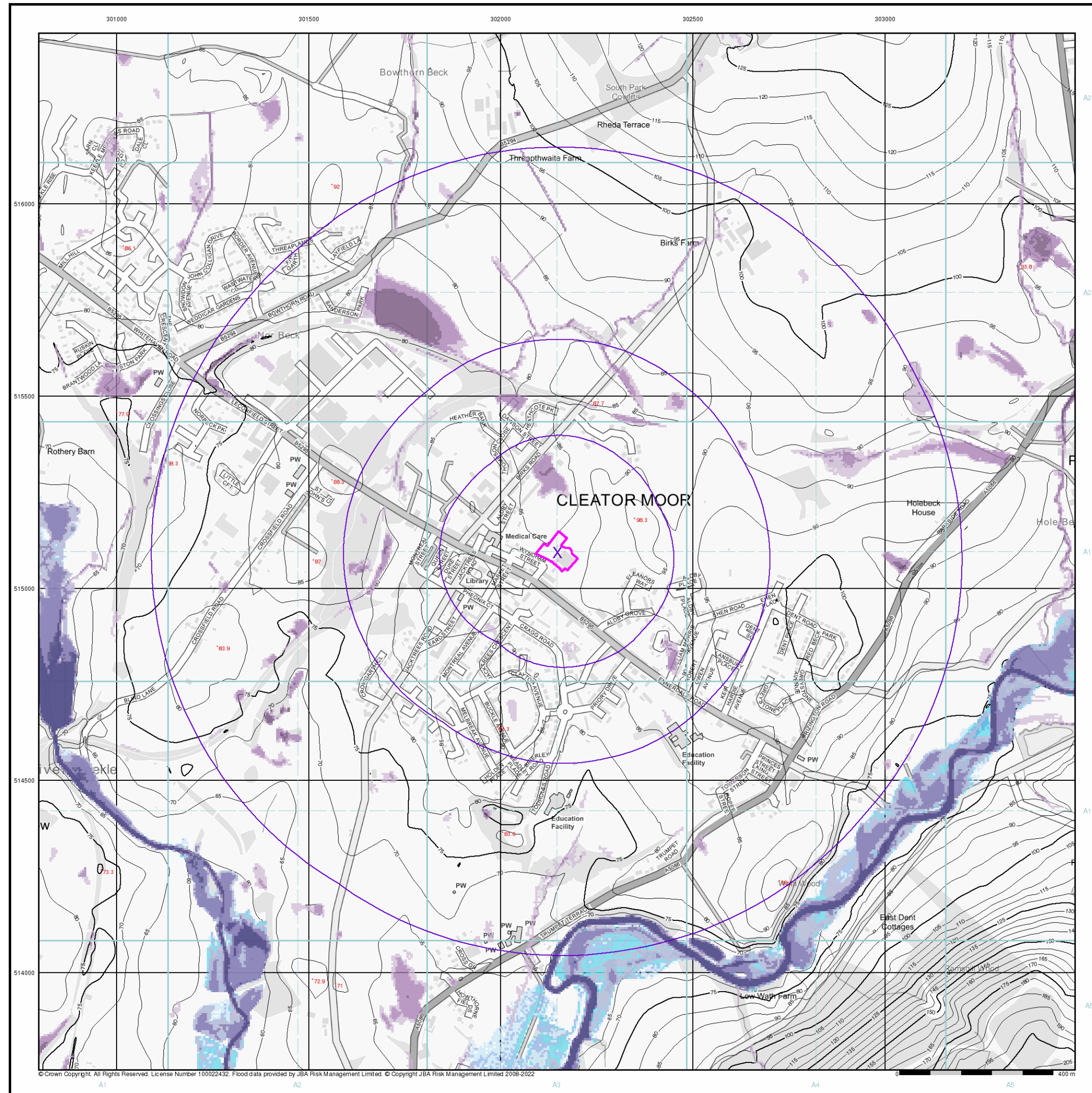
Order Number: 294855120_1_1
 Customer Ref: GEOL22-8472
 National Grid Reference: 302150, 515090
 Slice: A
 Site Area (Ha): 0.53
 Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria,
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JBA 200 Year Return Flood Map (Un defended) (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

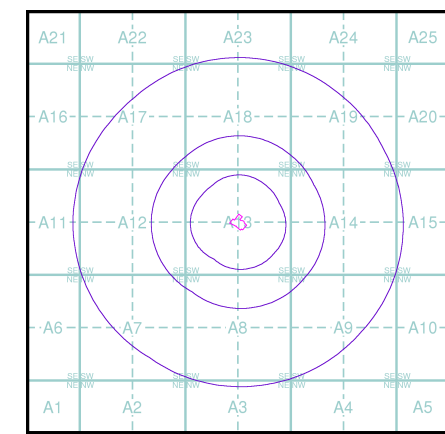
Modelled Flood Depth

Pluvial Depth	Fluvial Depth	Coastal Depth
0.1m	0.01m - 0.05m	0.01m - 0.05m
0.1m - 0.3m	0.05m - 0.1m	0.05m - 0.1m
0.3m - 1m	0.1m - 0.3m	0.1m - 0.3m
>1m	0.3m - 1m	0.3m - 1m
	>1m	>1m

Contours (height in metres)

- Standard Contour
- Master Contour
- Spot Height
- MLW Mean Low Water
- MHW Mean High Water

JBA 200 Year Return Flood Map (Un defended) - Slice A



Order Details

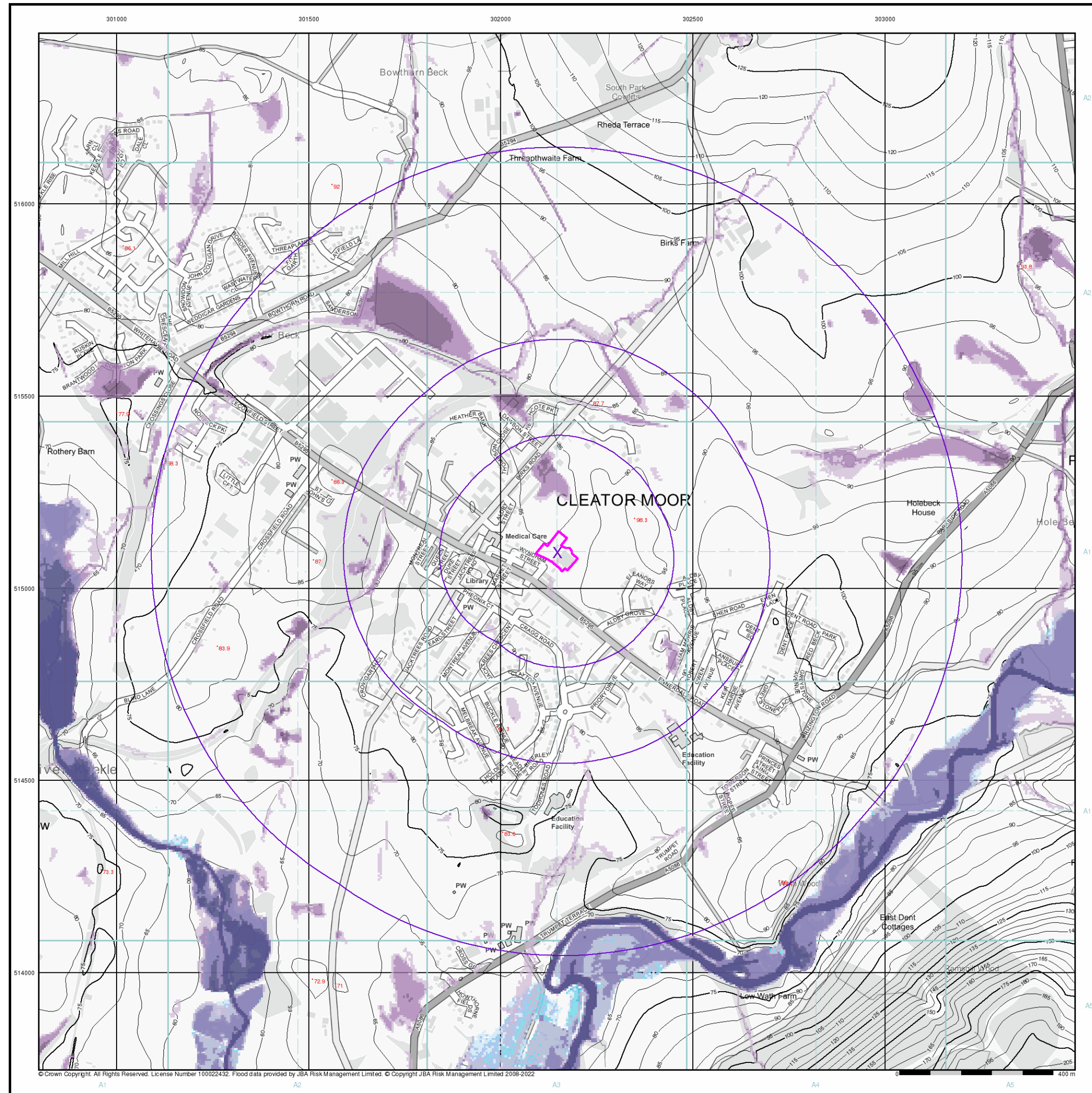
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

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JBA 1000 Year Return Flood Map (Undefended) (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

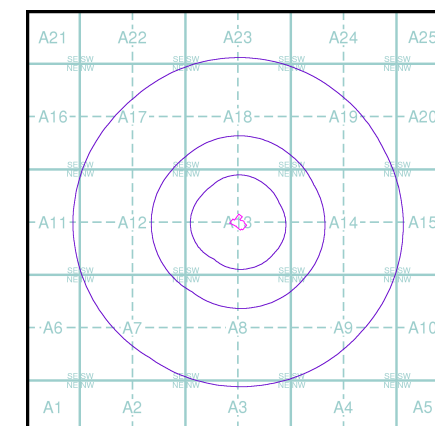
Modelled Flood Depth

Pluvial Depth	Fluvial Depth	Coastal Depth
0.1m	0.01m - 0.05m	0.01m - 0.05m
0.1m - 0.3m	0.05m - 0.1m	0.05m - 0.1m
0.3m - 1m	0.1m - 0.3m	0.1m - 0.3m
>1m	0.3m - 1m	0.3m - 1m
	>1m	>1m

Contours (height in metres)

- Standard Contour: 105, 100, 95
- Master Contour: 105, 100, 95
- Spot Height: 167.8
- MLW: Mean Low Water
- MHW: Mean High Water

JBA 1000 Year Return Flood Map (Undefended) - Slice A



Order Details

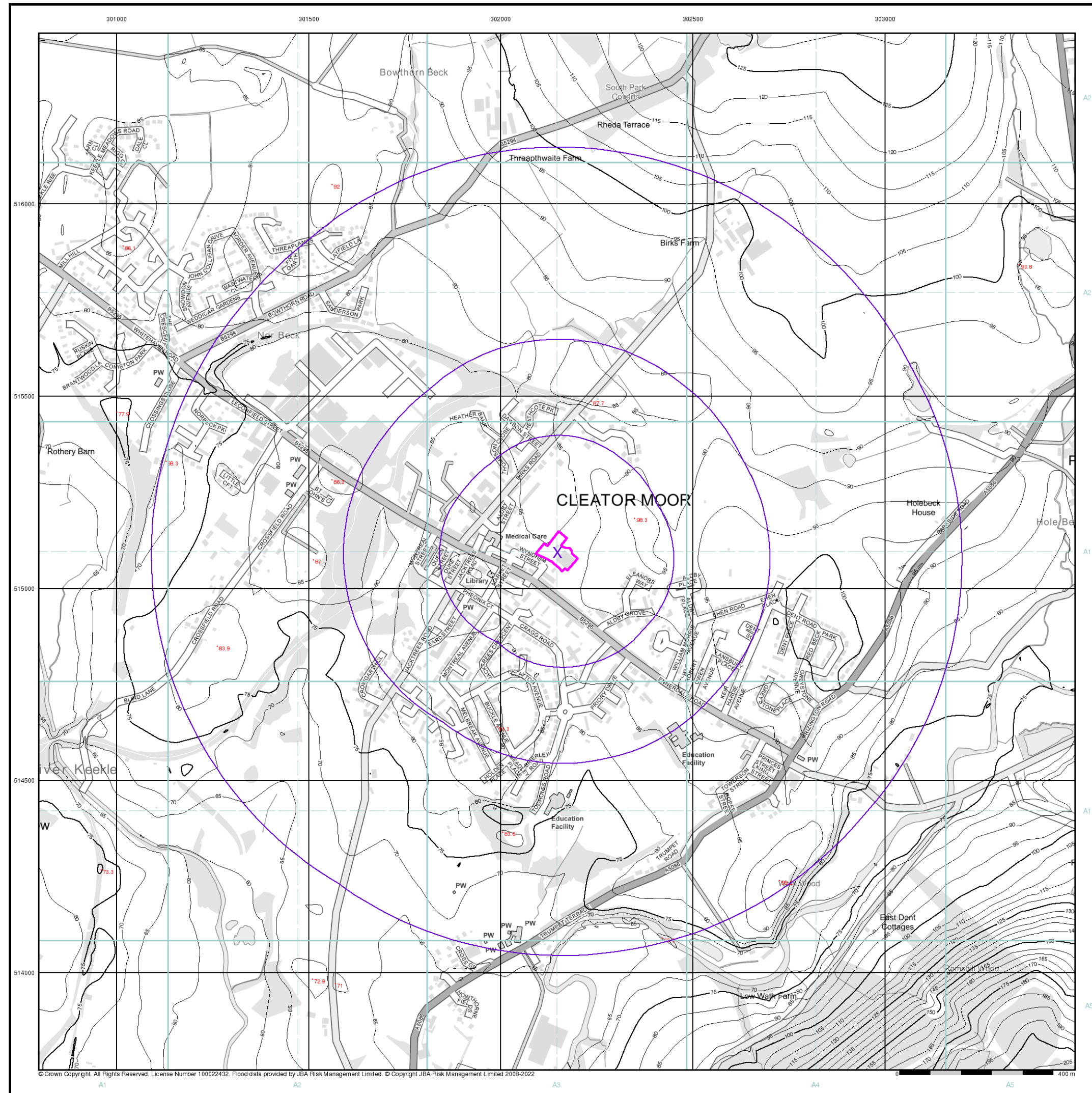
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN



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JBA Canal Failure Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

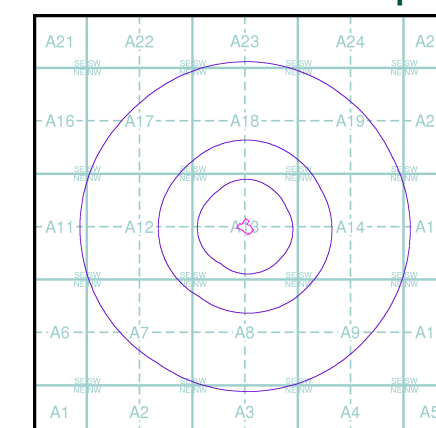
Flood Data

- Canal Failure
- Coverage

Contours (height in metres)

- Standard Contour
- Master Contour
- Spot Height
- MLW Mean Low Water
- MHW Mean High Water

JBA Canal Failure Flood Map - Slice A



Order Details

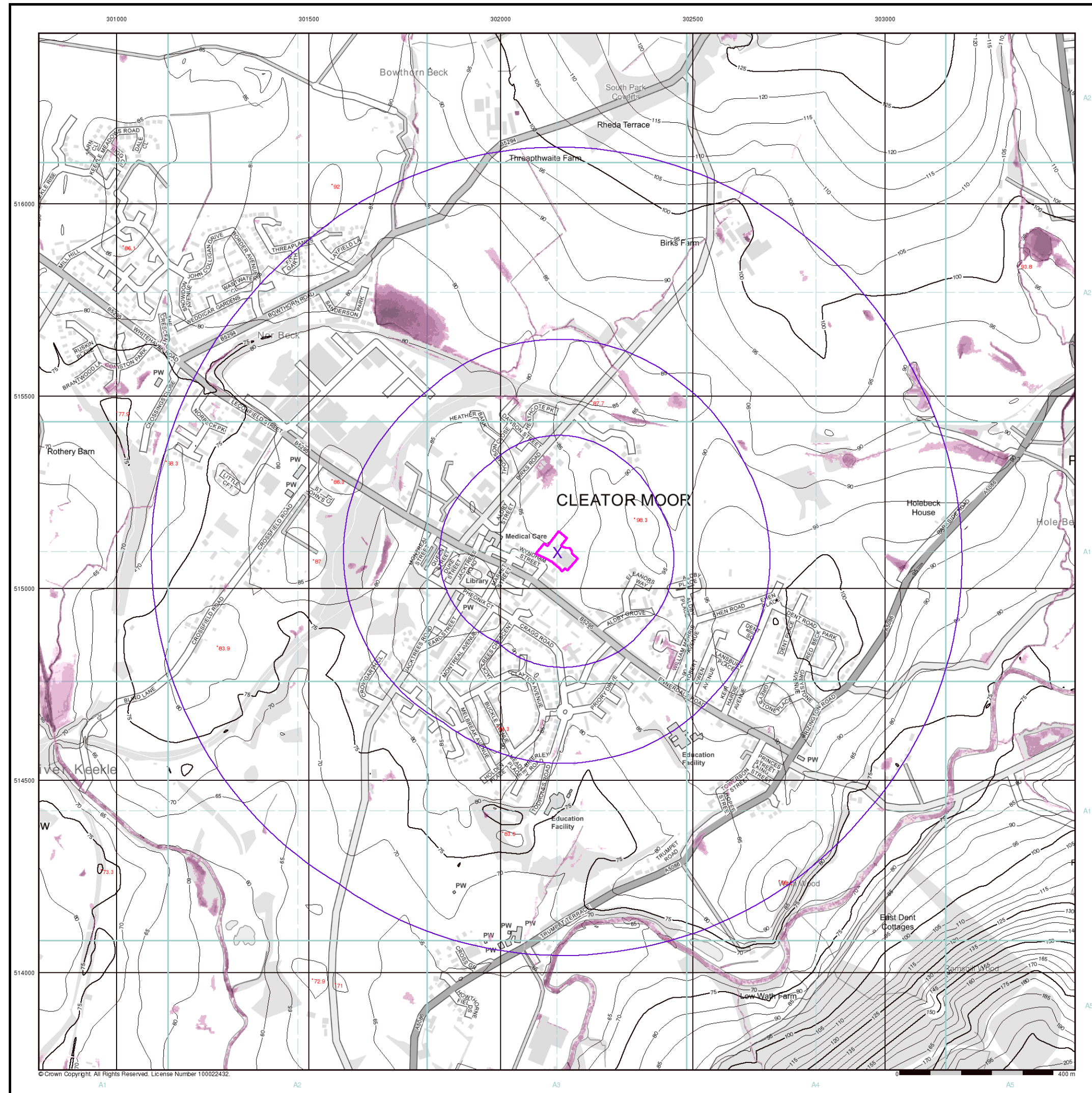
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN



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EA/NRW Surface Water 30 Year Return Depth Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Surface Water Depth

- 0 - 0.15m
- 0.15 - 0.30m
- 0.30 - 0.60m
- 0.60 - 0.90m
- 0.90 - 1.20m
- > 1.20m

Contours (height in metres)

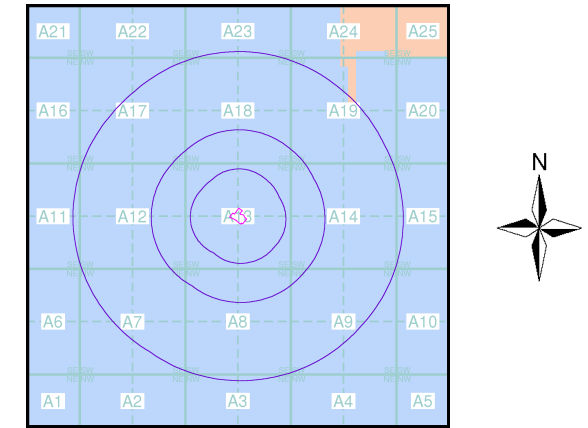
- Standard Contour
- Master Contour
- Spot Height
- MLW Mean Low Water
- MHW Mean High Water

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice A



Order Details

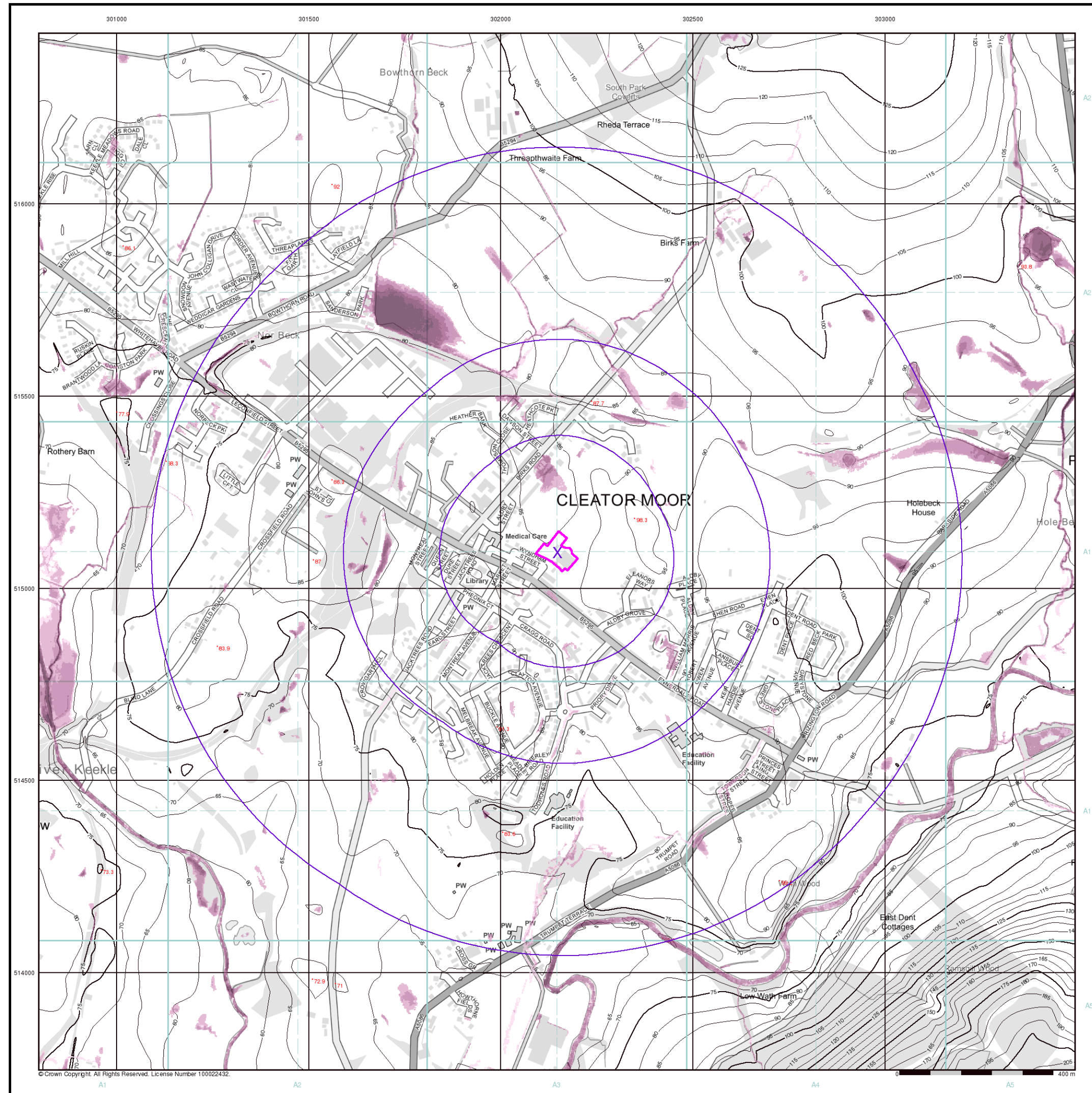
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN

Landmark
INFORMATION GROUP

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Fax: 0844 844 9951
Web: www.envirocheck.co.uk



EA/NRW Surface Water 100 Year Return Depth Map

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

Surface Water Depth

- 0 - 0.15m
- 0.15 - 0.30m
- 0.30 - 0.60m
- 0.60 - 0.90m
- 0.90 - 1.20m
- > 1.20m

Contours (height in metres)

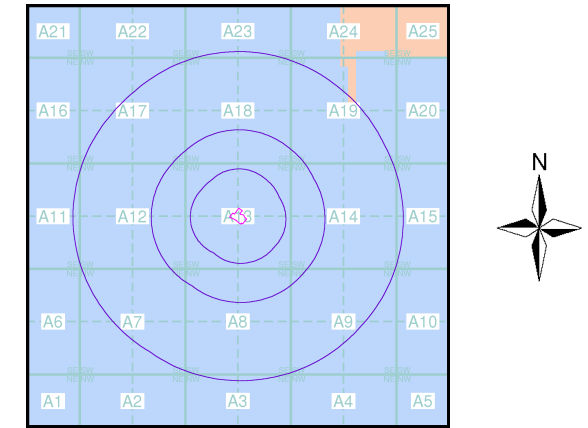
- Standard Contour
- Master Contour
- Spot Height

Suitability

See the suitability map below

- National to county
- County to town
- Town to street
- Street to parcels of land
- Property

EA/NRW Suitability Map - Slice A



Order Details

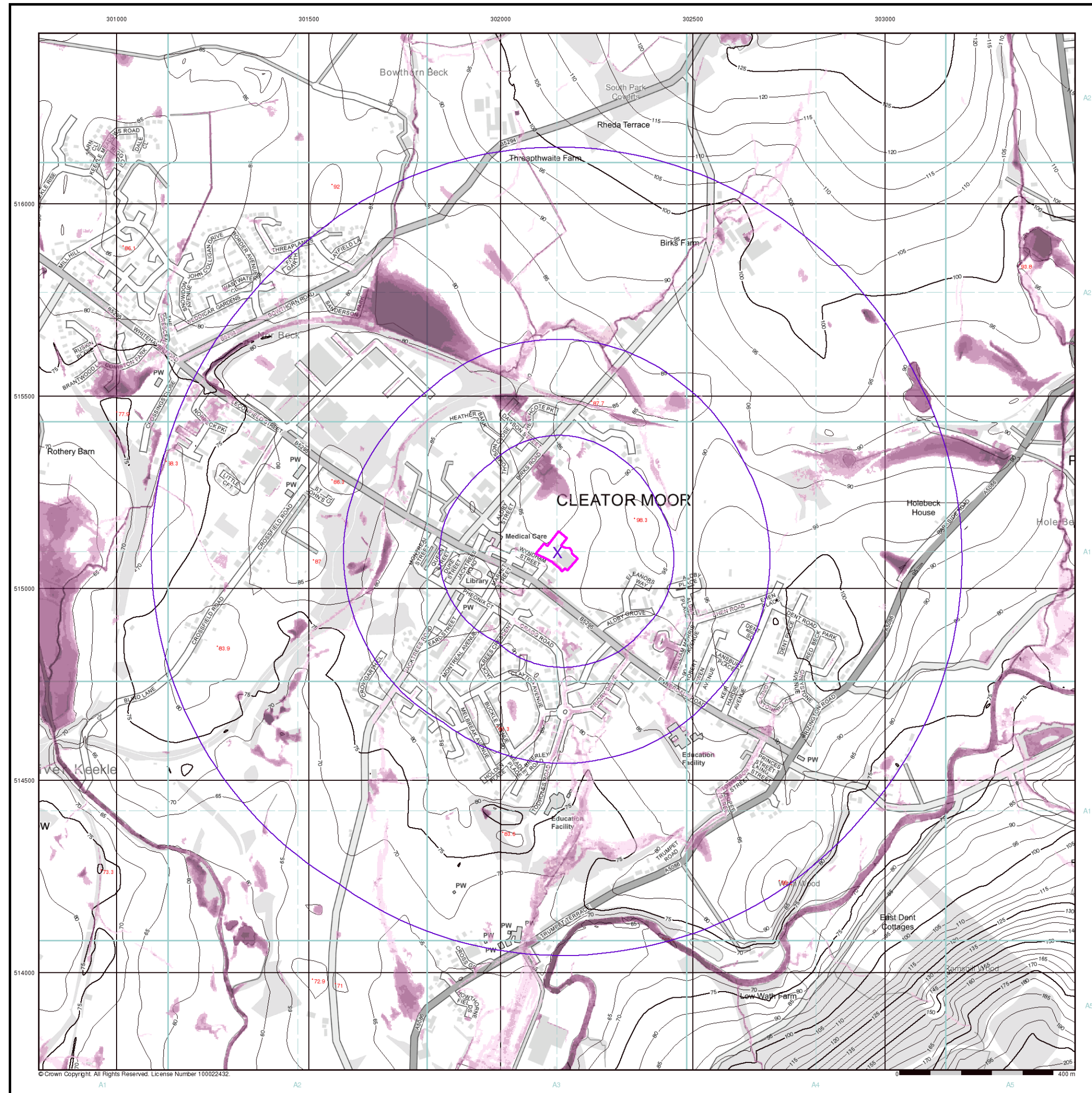
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN

Landmark
INFORMATION GROUP

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EA/NRW Surface Water 1000 Year Return Depth Map (1:10,000)

General
Specified Site Specified Buffer(s) X Bearing Reference Point

Surface Water Depth

- 0 - 0.15m
- 0.15 - 0.30m
- 0.30 - 0.60m
- 0.60 - 0.90m
- 0.90 - 1.20m
- > 1.20m

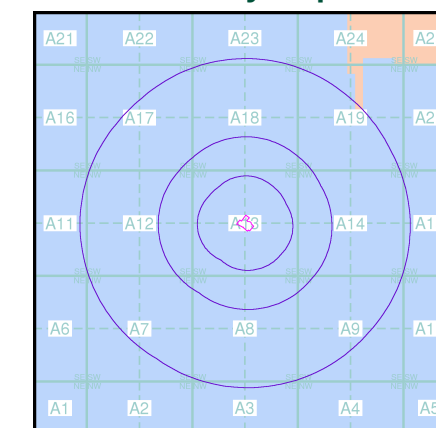
Contours (height in metres)

- Standard Contour 105 100 95
- Master Contour 105 100 95
- Spot Height *167.8
- MLW Mean Low Water
- MHW Mean High Water

Suitability

- See the suitability map below
- National to county
 - County to town
 - Town to street
 - Street to parcels of land
 - Property

EA/NRW Suitability Map - Slice A



Order Details

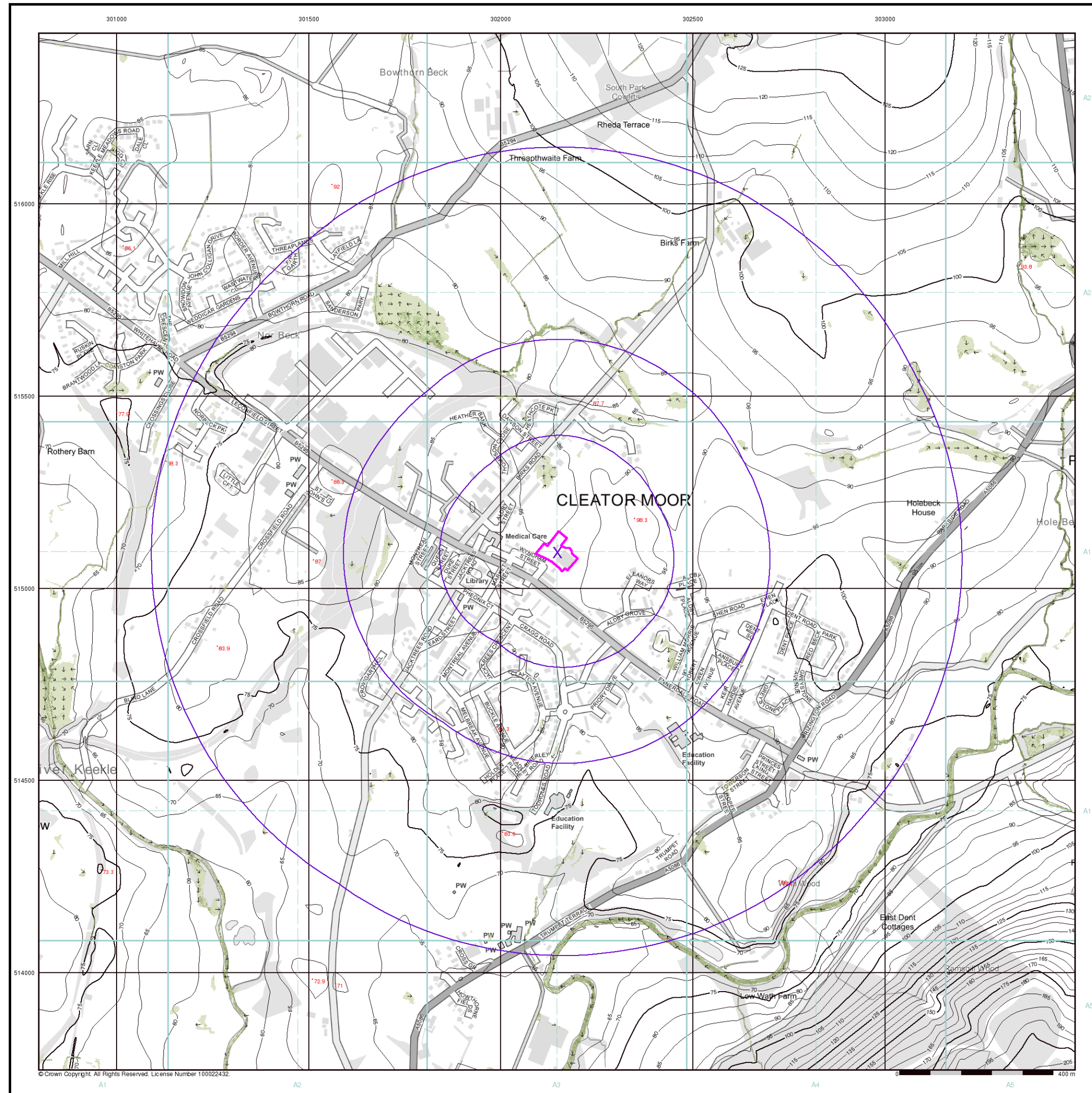
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN



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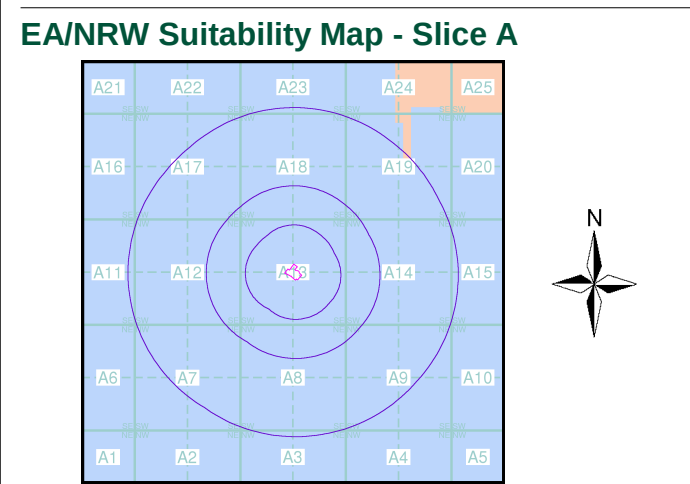
EA/NRW Surface Water 30 Year Return Velocity and Flow Direction Map (1:10,000)

General
Specified Site Specified Buffer(s) Bearing Reference Point

Surface Water Velocity and Direction
0.00 - 0.25m/s
0.25 - 0.50m/s
0.50 - 1.00m/s
1.00 - 2.00m/s
> 2.00m/s
Flow Direction at maximum velocity

Contours (height in metres)
Standard Contour
Master Contour
Spot Height
MLW Mean Low Water
MHW Mean High Water

Suitability
See the suitability map below
National to county
County to town
Town to street
Street to parcels of land
Property

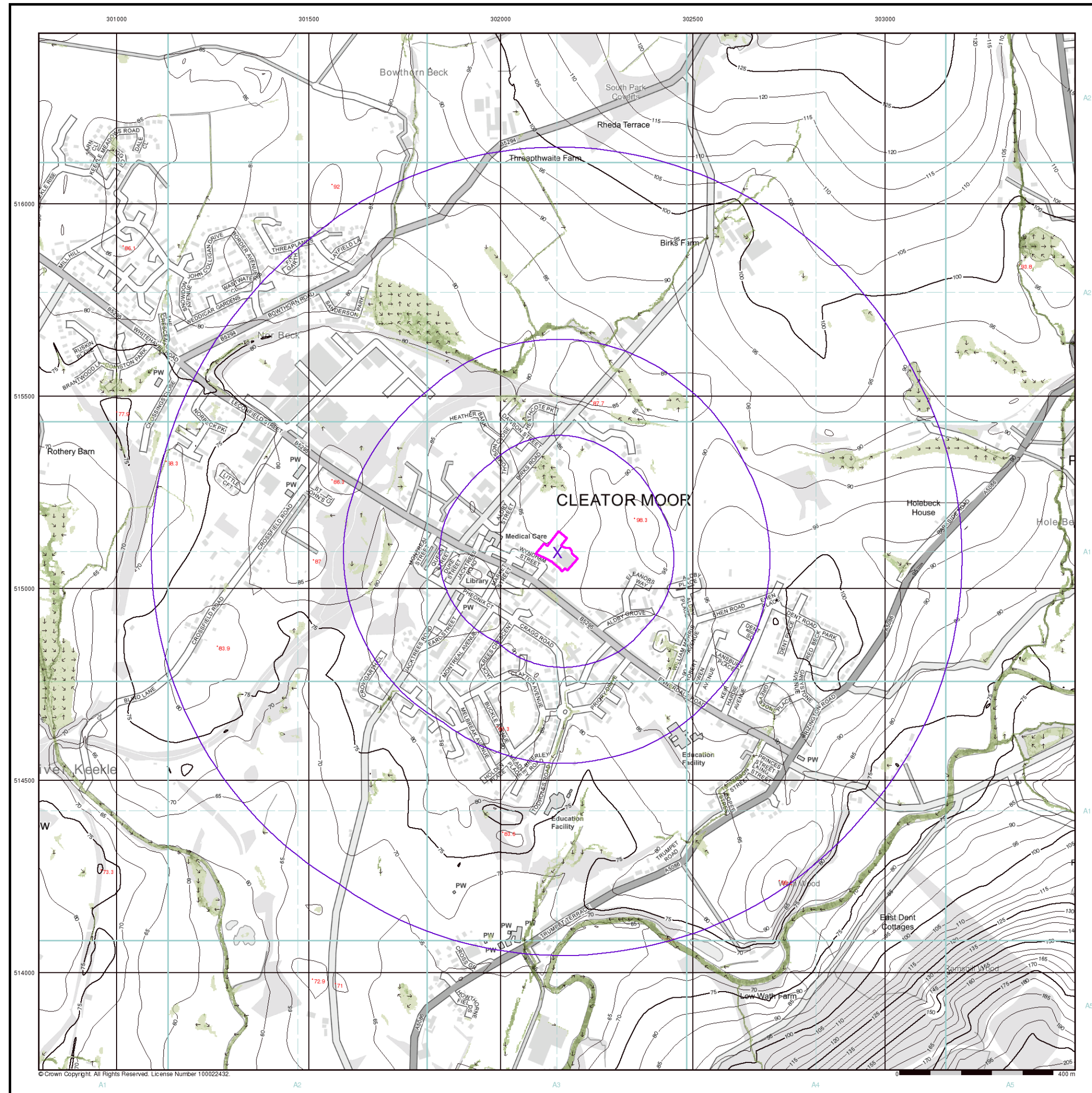


Order Details
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details
Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN

Landmark
INFORMATION GROUP

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Web: www.envirocheck.co.uk



EA/NRW Surface Water 100 Year Return Velocity and Flow Direction Map (1:10,000)

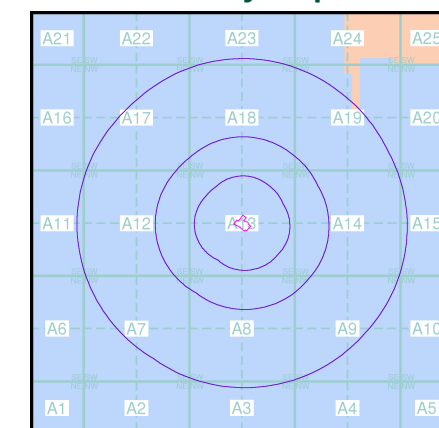
General
Specified Site Specified Buffer(s) Bearing Reference Point

Surface Water Velocity and Direction
0.00 - 0.25m/s
0.25 - 0.50m/s
0.50 - 1.00m/s
1.00 - 2.00m/s
> 2.00m/s
Flow Direction at maximum velocity

Contours (height in metres)
Standard Contour
Master Contour
Spot Height
MLW Mean Low Water
MHW Mean High Water

Suitability
See the suitability map below
National to county
County to town
Town to street
Street to parcels of land
Property

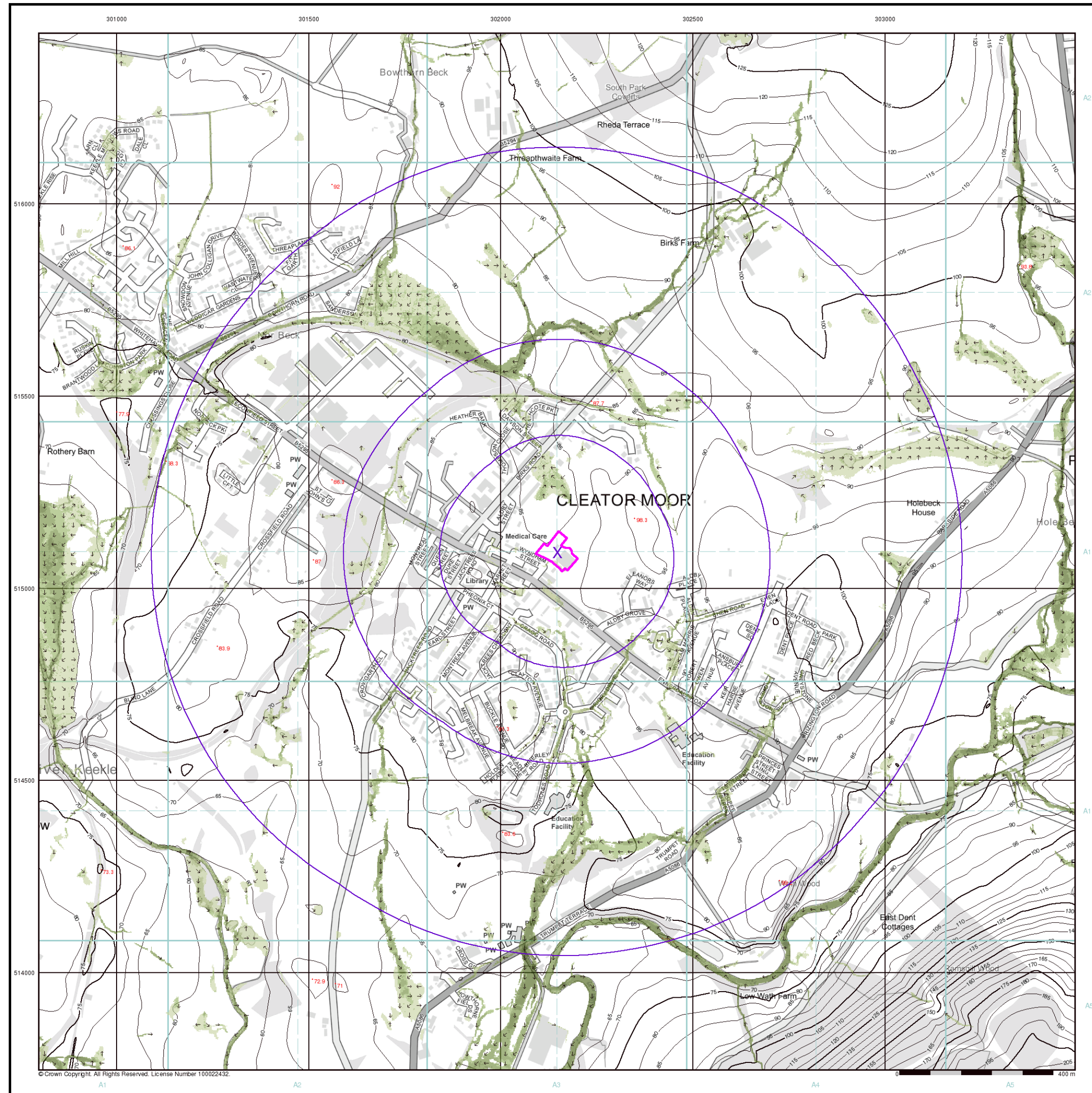
EA/NRW Suitability Map - Slice A



Order Details
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details
Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN

Landmark
INFORMATION GROUP
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



EA/NRW Surface Water 1000 Year Return Velocity and Flow Direction Map (1:10,000)

General

Specified Site Specified Buffer(s) Bearing Reference Point

Surface Water Velocity and Direction

0.00 - 0.25m/s
0.25 - 0.50m/s
0.50 - 1.00m/s
1.00 - 2.00m/s
> 2.00m/s

Flow Direction at maximum velocity

Contours (height in metres)

Standard Contour
Master Contour
Spot Height *167.8

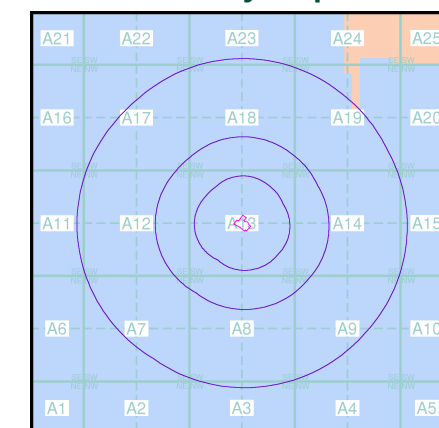
MLW Mean Low Water
MHW Mean High Water

Suitability

See the suitability map below

National to county
County to town
Town to street
Street to parcels of land
Property

EA/NRW Suitability Map - Slice A



Order Details

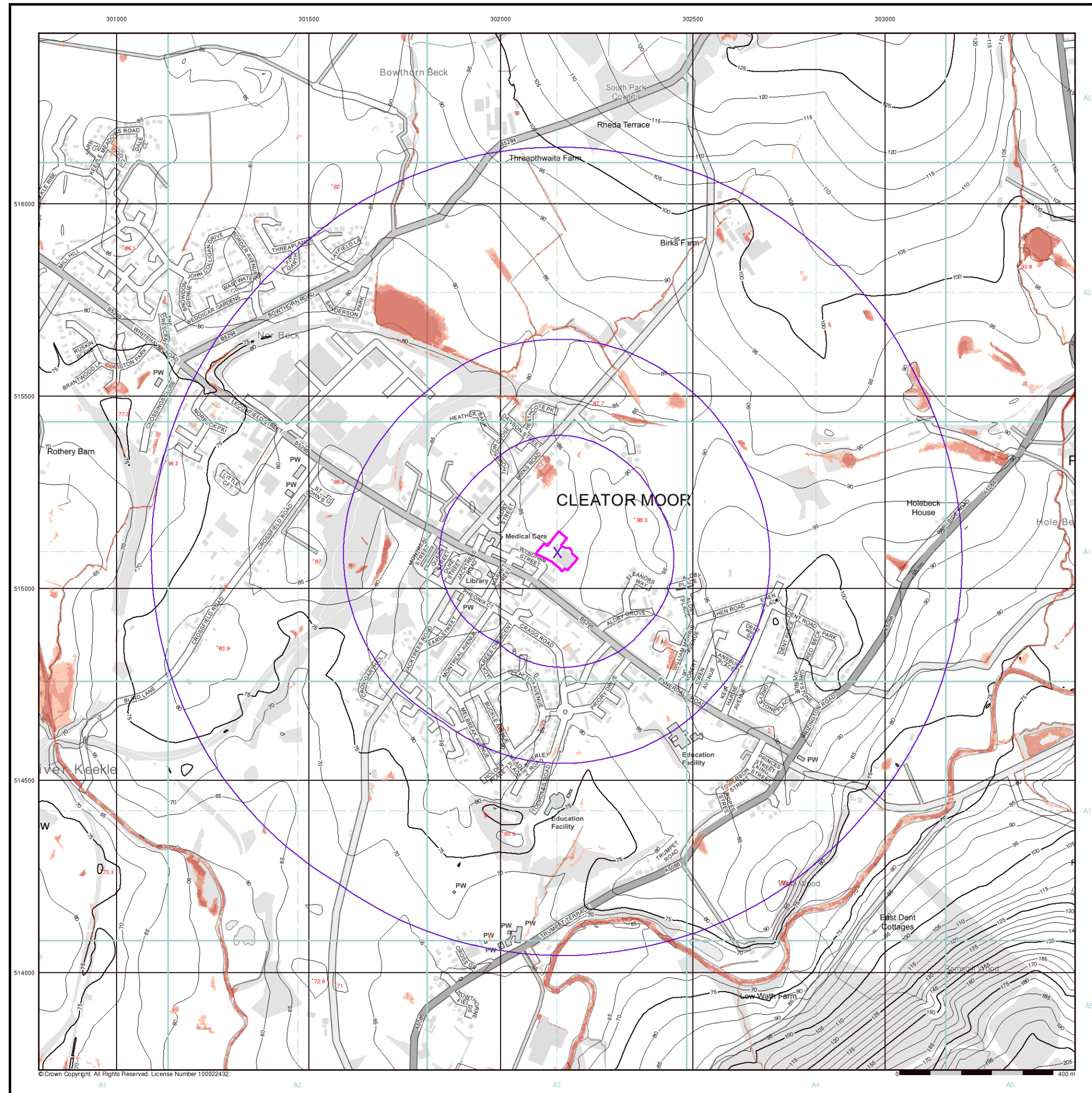
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN



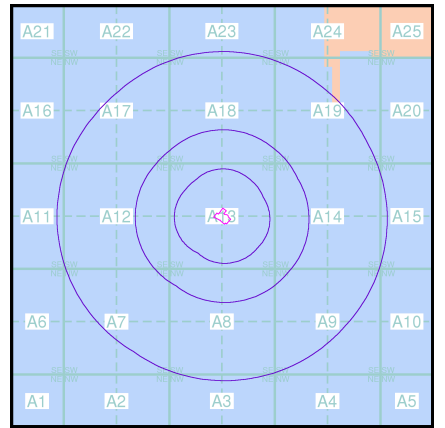
Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



EA/NRW Surface Water 30 Year Return Hazard Rating Map (1:10,000)

- General**
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
- Surface Water Hazard Rating**
- Low (0.5 – 0.75)
 - Moderate (0.75 – 1.25)
 - Significant (1.25 – 2.0)
 - Extreme (>2.0)
- Contours (height in metres)**
- Standard Contour
 - Master Contour
 - Spot Height
- Suitability**
- See the suitability map below
- National to county
 - County to town
 - Town to street
 - Street to parcels of land
 - Property

EA/NRW Suitability Map - Slice A

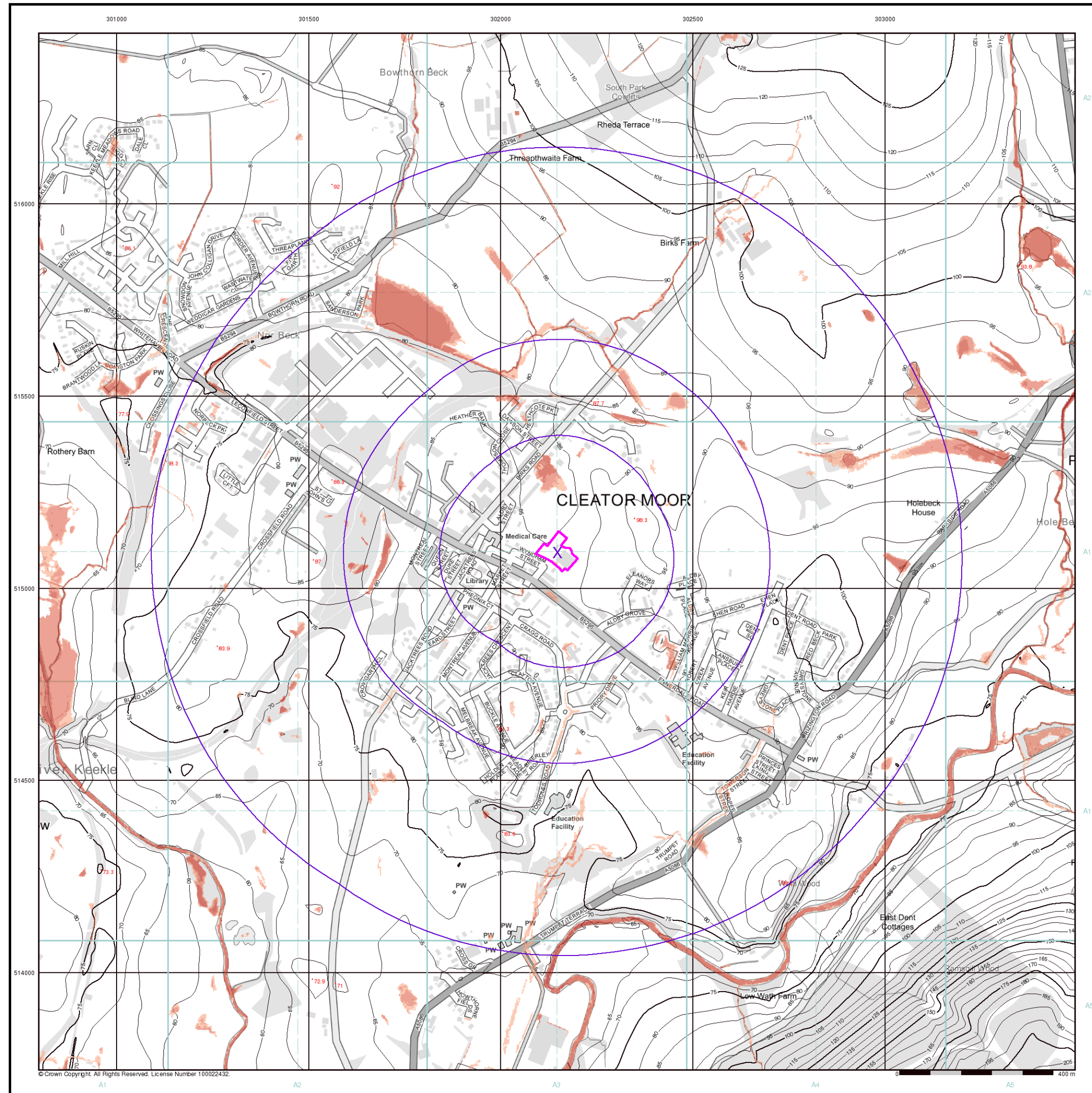


Order Details

Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN



EA/NRW Surface Water 100 Year Return Hazard Rating Map (1:10,000)

General
Specified Site Specified Buffer(s) Bearing Reference Point

Surface Water Hazard Rating

- Low (0.5 – 0.75)
- Moderate (0.75 – 1.25)
- Significant (1.25 – 2.0)
- Extreme (>2.0)

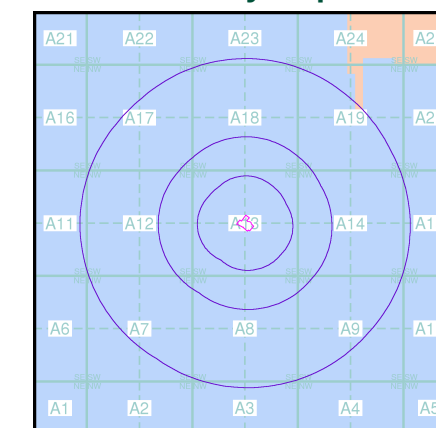
Contours (height in metres)

- Standard Contour Master Contour Spot Height
- MLW Mean Low Water
MHW Mean High Water
- *167.8

Suitability

- See the suitability map below
- National to county
 - County to town
 - Town to street
 - Street to parcels of land
 - Property

EA/NRW Suitability Map - Slice A



Order Details

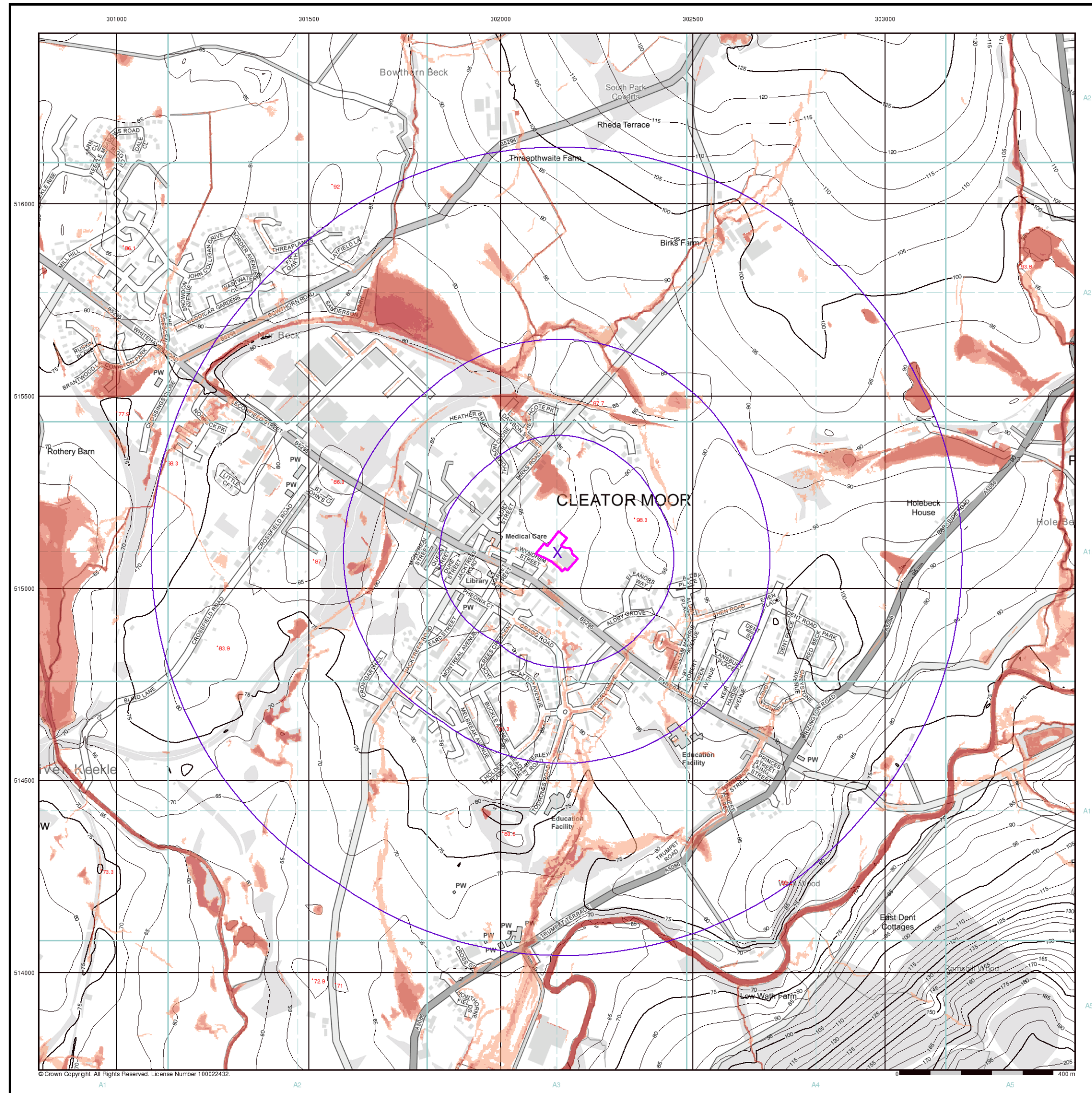
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN



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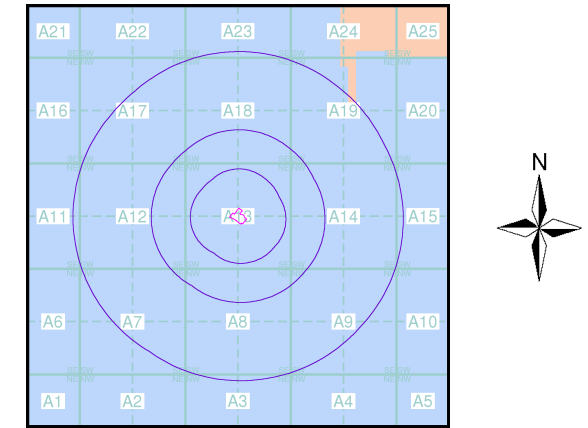
EA/NRW Surface Water 1000 Year Return Hazard Rating Map (1:10,000)

- General**
- Specified Site
 - Specified Buffer(s)
 - Bearing Reference Point
- Surface Water Hazard Rating**
- Low (0.5 – 0.75)
 - Moderate (0.75 – 1.25)
 - Significant (1.25 – 2.0)
 - Extreme (>2.0)

- Contours (height in metres)**
- Standard Contour
 - Master Contour
 - Spot Height
- MLW — Mean Low Water
— MHW — Mean High Water

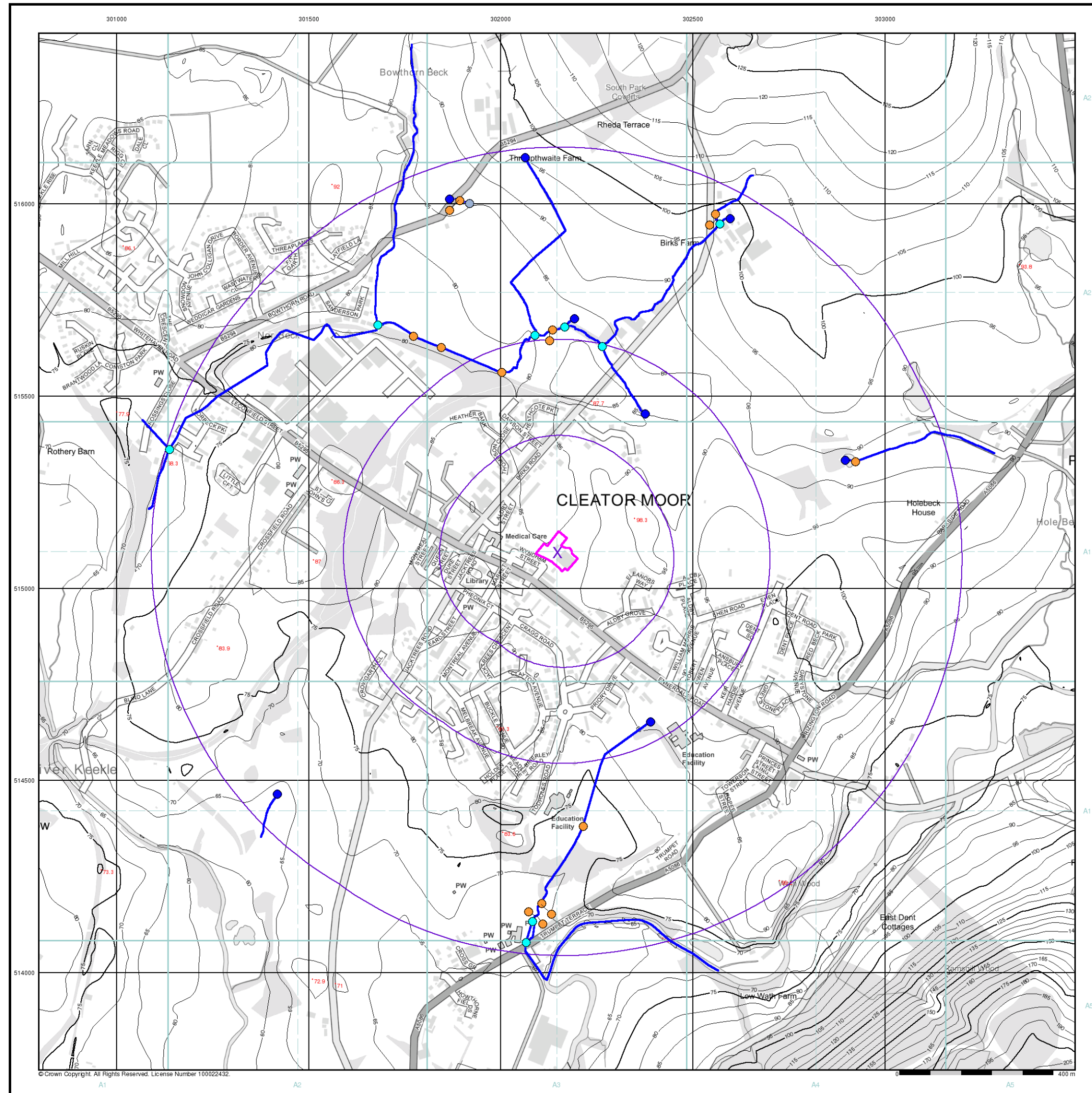
- Suitability**
- See the suitability map below
- National to county
 - County to town
 - Town to street
 - Street to parcels of land
 - Property

EA/NRW Suitability Map - Slice A



- Order Details**
- Order Number: 294855120_1_1
 - Customer Ref: GEOL22-8472
 - National Grid Reference: 302150, 515090
 - Slice: A
 - Site Area (Ha): 0.53
 - Search Buffer (m): 1000

- Site Details**
- Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN



OS Water Network Lines Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point

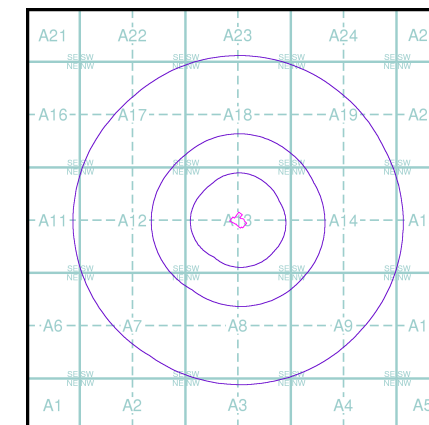
OS Water Network Data

- | | |
|--------------|-------------------------|
| Canal | Drain |
| Reservoir | Other |
| Foreshore | Lake |
| Marsh | Transfer |
| Tidal River | Lock Or Flight Of Locks |
| Inland River | Sea |
| Junction | Source |
| Outlet | Other |
| Pseudo | |

Contours (height in meters)

- Standard Contour
- Master Contour
- Spot Height
- MLW Mean Low Water
- MHW Mean High Water

OS Water Network Map - Slice A



Order Details

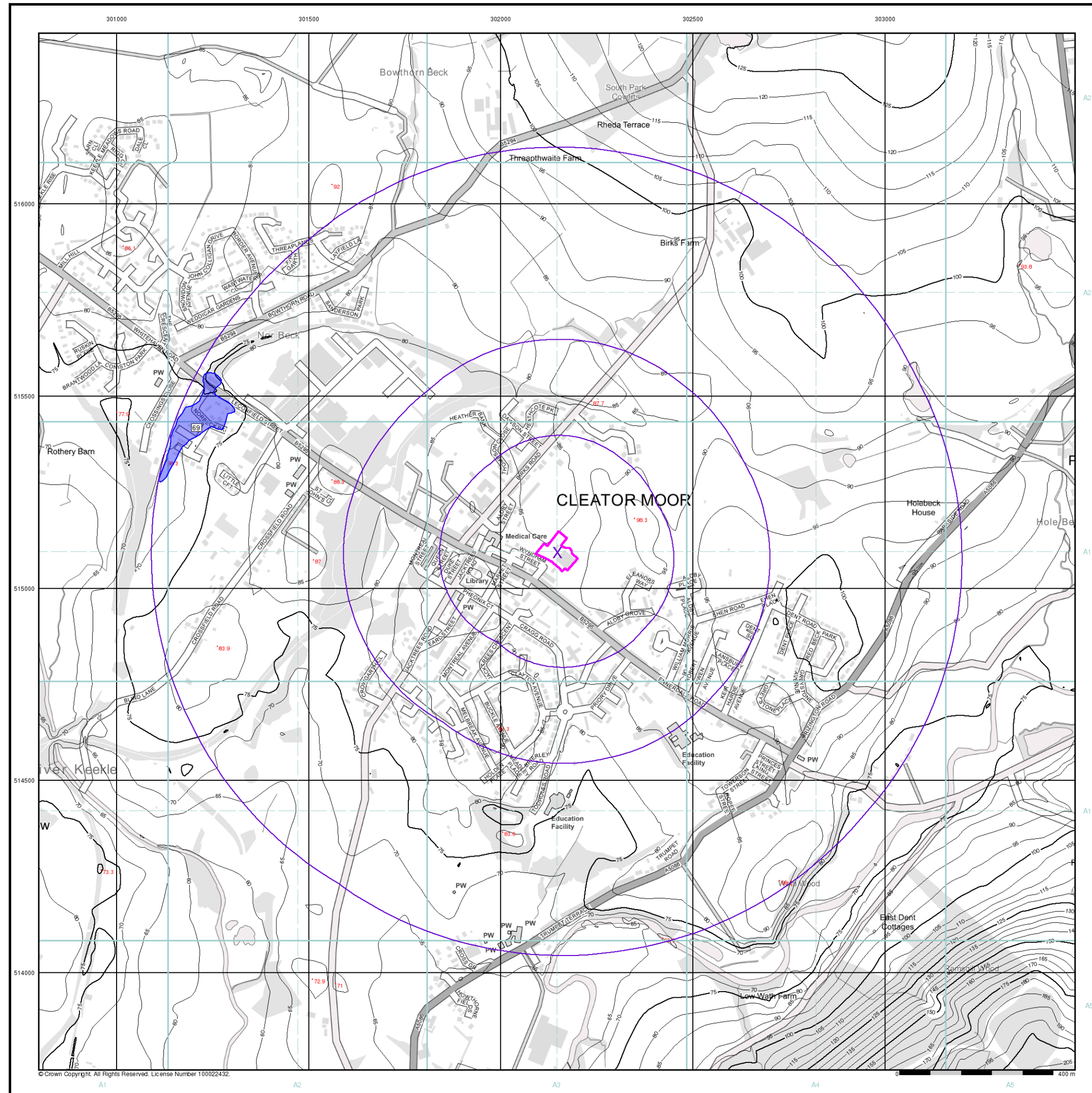
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

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EA/NRW Historic Flood Map (1:10,000)

General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Map ID

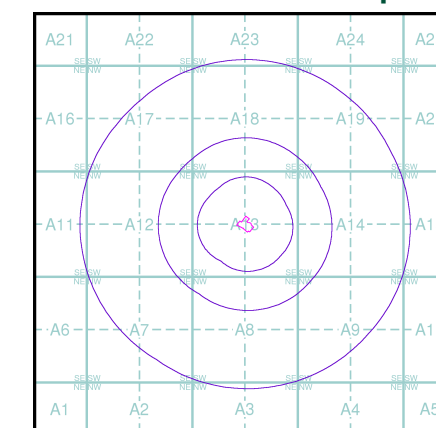
Historic Flood Events Data

- | | |
|--|--|
| Channel Capacity Exceeded (no raised defences) | Obstruction/Blockage - Culvert |
| Channel Capacity Exceeded /Surface Water | Obstruction/Blockage - Debris Screen |
| Groundwater/High Water Table | Operational Failure/ Breach of Defence |
| Local Drainage/Surface Water | Other |
| Mechanical Failure | Overtopping of Defences |
| Obstruction/Blockage - Bridge | Surface Water |
| Obstruction/Blockage - Channel | Unknown |
| Historical Flood Liabilities | |

Contours (height in metres)

- Standard Contour 105
- Master Contour 100
- Spot Height 167.8
- MLW Mean Low Water
- MHW Mean High Water

EA/NRW Historic Flood Map - Slice A



Order Details

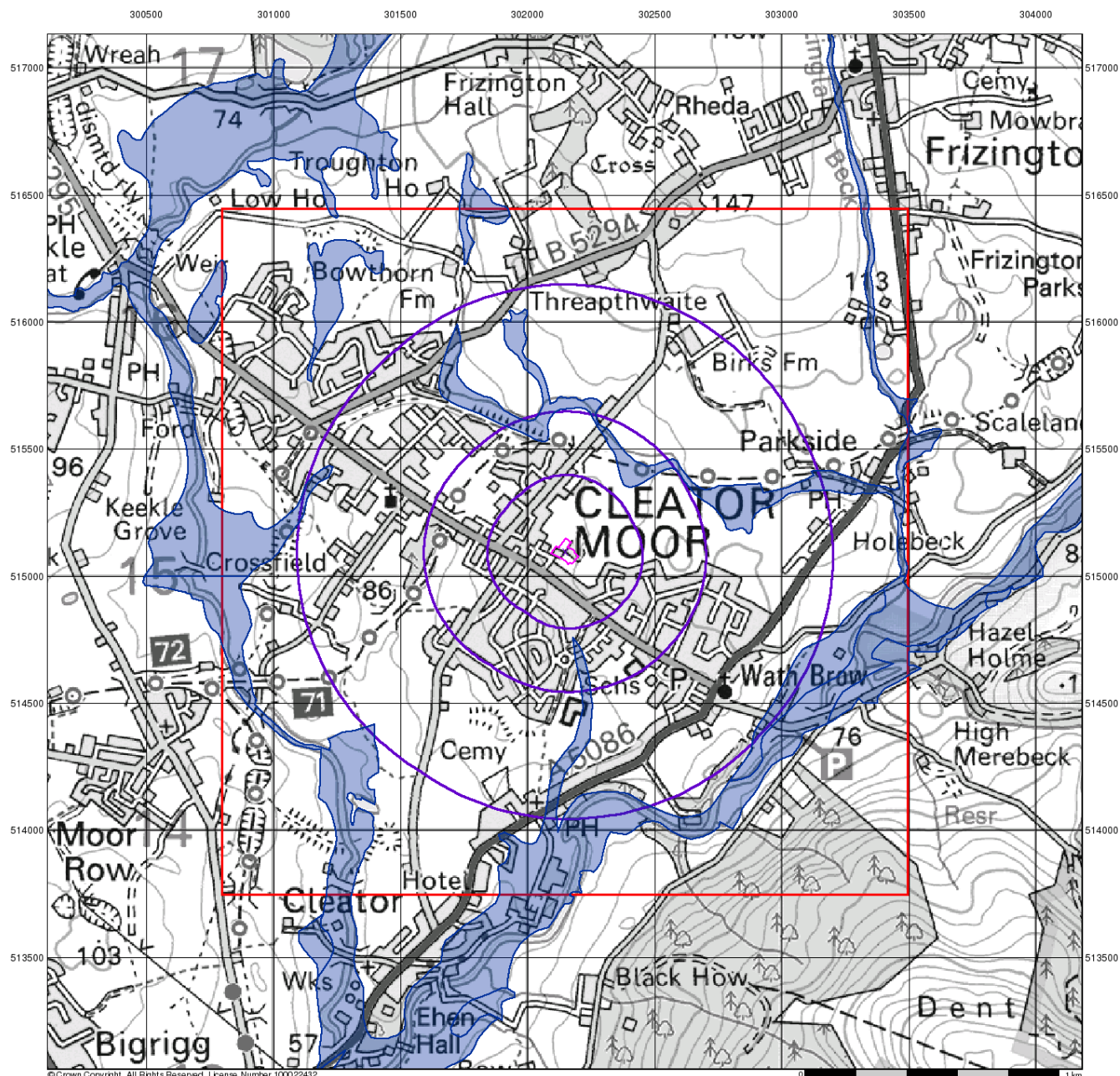
Order Number: 294855120_1_1
Customer Ref: GEOL22-8472
National Grid Reference: 302150, 515090
Slice: A
Site Area (Ha): 0.53
Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN

Landmark
INFORMATION GROUP

Tel: 0844 844 9952
Fax: 0844 844 9951
Web: www.envirocheck.co.uk



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BGS Flood Data (1:50,000)

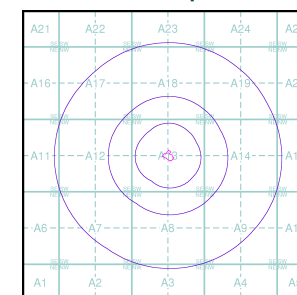
General

- ◆ Specified Site
- Specified Buffer(s)
- ✕ Bearing Reference Point
- Slice
- 8 Map ID

BGS Geological Indicators of Flooding

- ▨ Coastal
- Inland
- Bodies of Water

BGS Flood Data Map - Slice A



Order Details

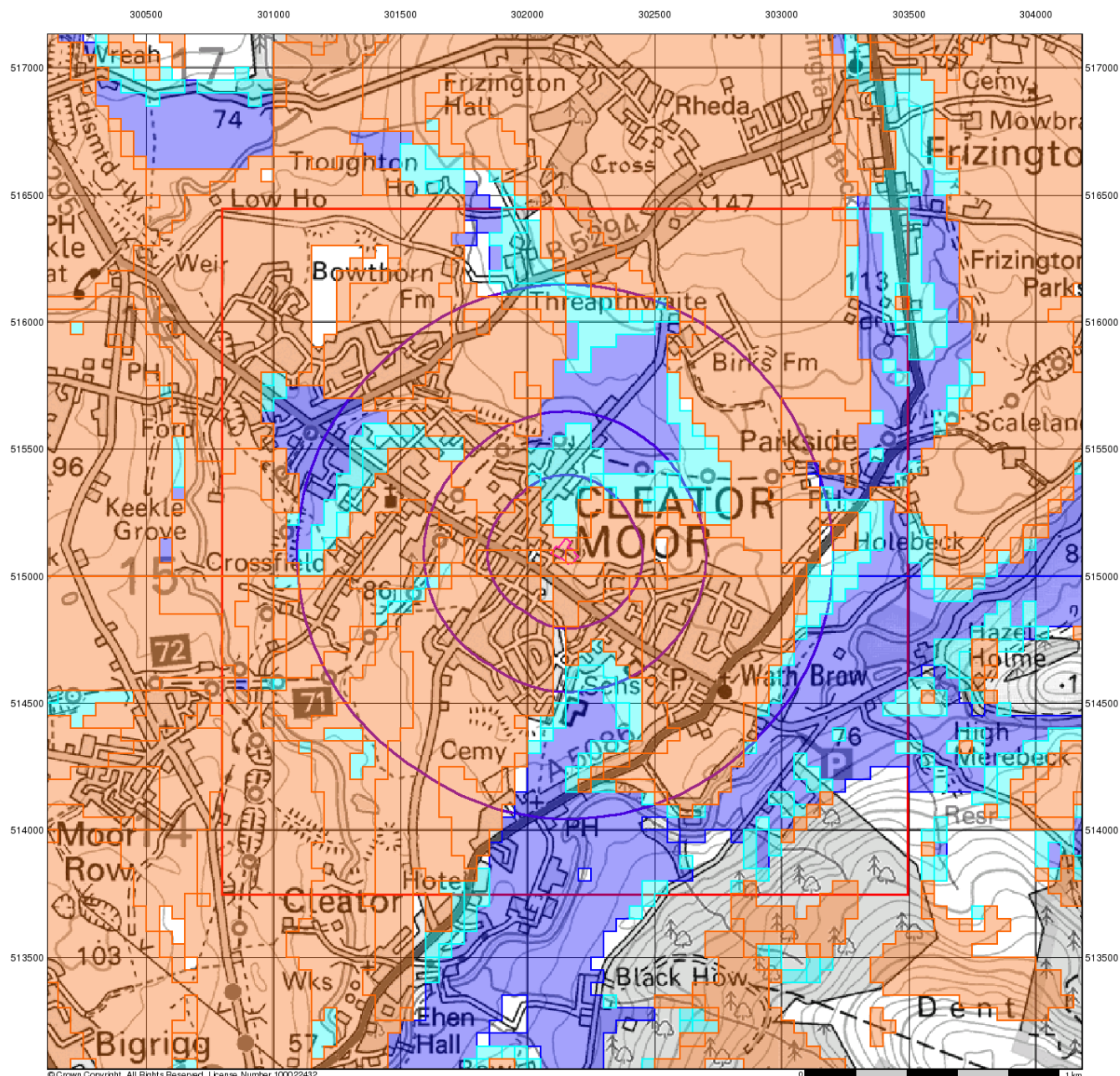
Order Number: 294855120_1_1
 Customer Ref: GEOL22-8472
 National Grid Reference: 302150, 515090
 Slice: A
 Site Area (Ha): 0.53
 Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN



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BGS Flood Data (1:50,000)

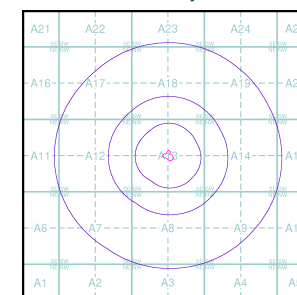
General

- ◇ Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Slice
- B Map ID

BGS Groundwater Flooding Susceptibility

- Potential for Groundwater Flooding to Occur at Surface
- Potential for Groundwater Flooding of Property Situated Below Ground Level
- Limited Potential for Groundwater Flooding to Occur

BGS Flood Data Map - Slice A



Order Details

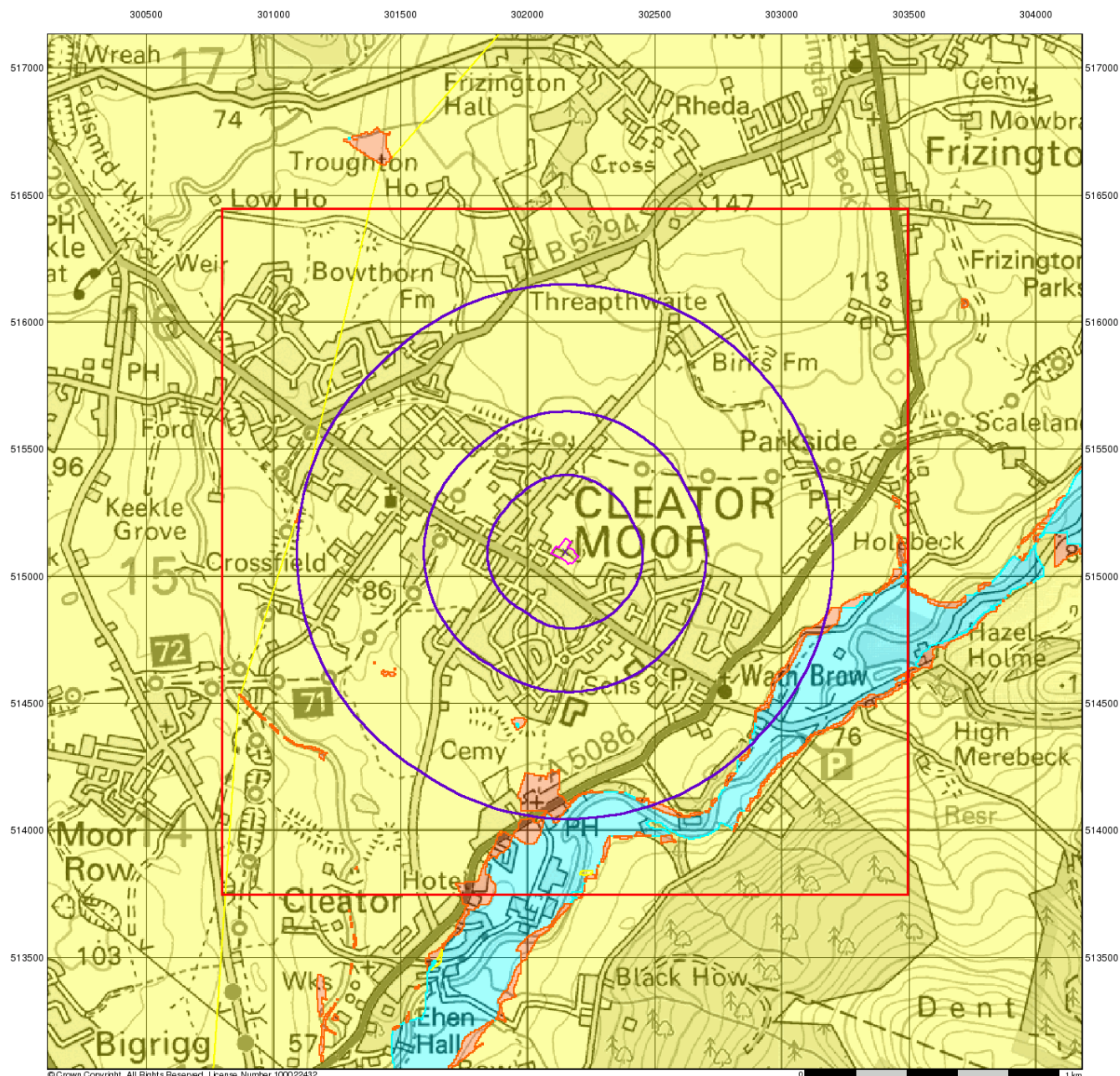
Order Number: 294855120_1_1
 Customer Ref: GEOL22-8472
 National Grid Reference: 302150, 515090
 Slice: A
 Site Area (Ha): 0.53
 Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN



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GeoSmart Information Groundwater Flood Map (1:50,000)

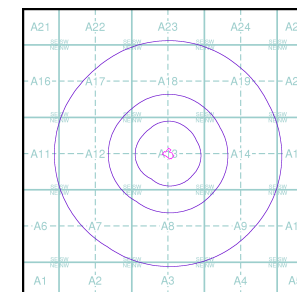
General

- Specified Site
- Specified Buffer(s)
- Bearing Reference Point
- Slice

GeoSmart Information Groundwater Flooding Risk

- High Risk
- Moderate Risk
- Low Risk
- Negligible Risk

GeoSmart Information Groundwater Flood Map - Slice A



Order Details

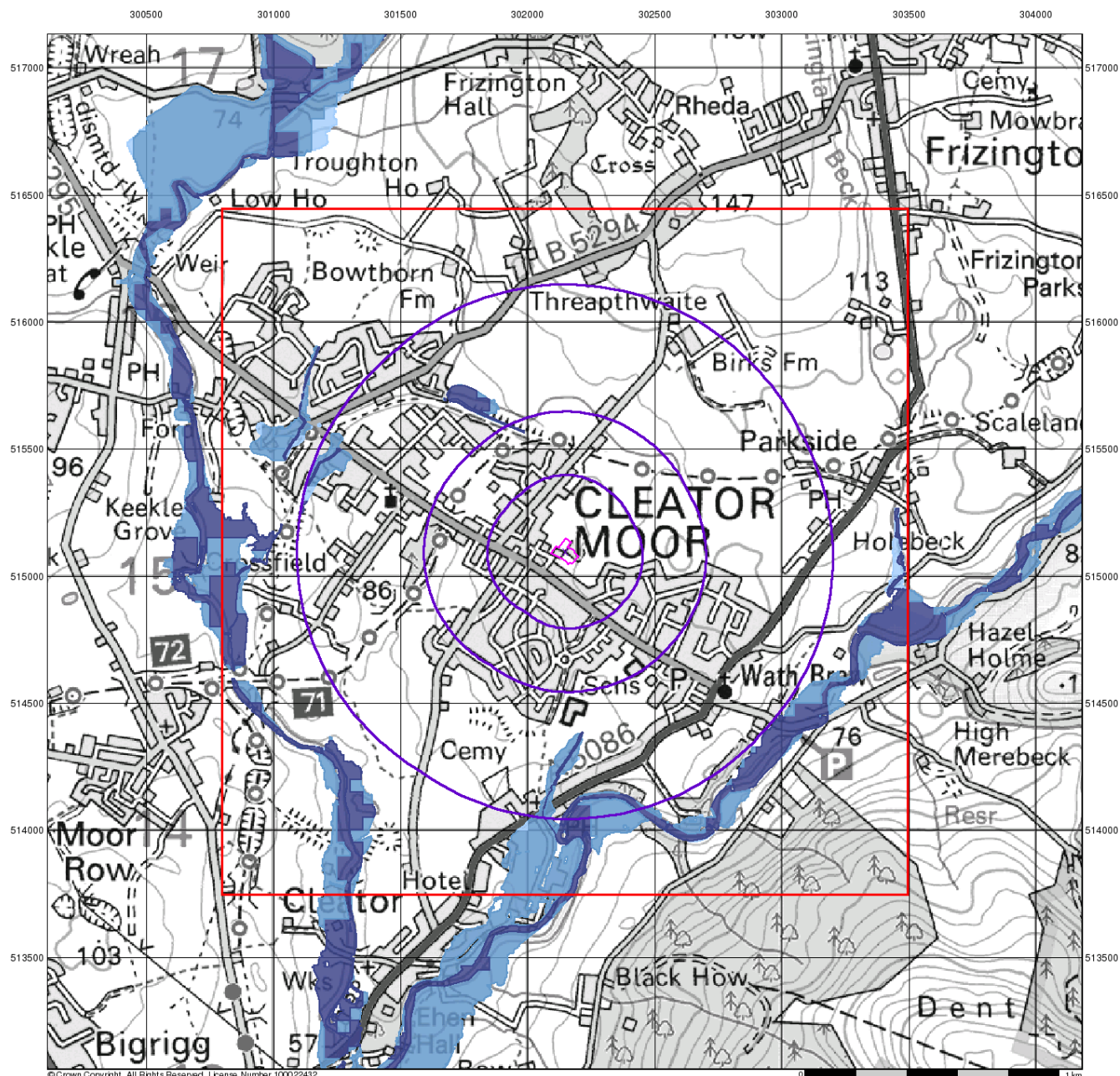
Order Number: 294855120_1_1
 Customer Ref: GEOL22-8472
 National Grid Reference: 302150, 515090
 Slice: A
 Site Area (Ha): 0.53
 Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN



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EA/NRW RoFRS Data (1:50,000)

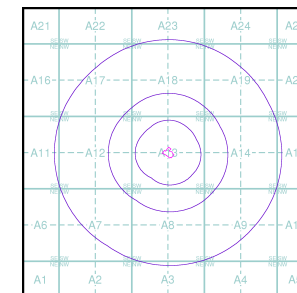
General

- ◇ Specified Site
- Specified Buffer(s)
- X Bearing Reference Point
- Slice
- 8 Map ID

Risk of Flooding from Rivers and Sea (RoFRS)

- High Risk
- Medium Risk
- Low Risk
- Very Low Risk

EA/NRW RoFRS Data Map - Slice A



Order Details

Order Number: 294855120_1_1
 Customer Ref: GEOL22-8472
 National Grid Reference: 302150, 515090
 Slice: A
 Site Area (Ha): 0.53
 Search Buffer (m): 1000

Site Details

Cleator Moor Activity Centre, CLEATOR MOOR, Cumbria, CA25 5AN



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.ernirocheck.co.uk



Envirocheck[®] Report:

Flood Screening Report Datasheet

Order Details:

Order Number:

294855120_1_1

Customer Reference:

GEOL22-8472

National Grid Reference:

302150, 515090

Slice:

A

Site Area (Ha):

0.53

Search Buffer (m):

1000

Site Details:

Cleator Moor Activity Centre

CLEATOR MOOR

Cumbria

CA25 5AN

Client Details:

G

Geol Consultants Ltd

3 Gladstone Terrace

Gateshead

NE8 4DY

Report Section and Details	Page Number
Summary	-
The Summary section provides an overview of the data contained within the report, detailing the number of data set features or the existence of a data set in relation to the buffer(s) selected. For ease of reference, the report is broken down into seven sections of data.	
EA / NRW / CEH Flood Data	-
This section details data from the Environment Agency/Natural Resources Wales and the Centre for Ecology and Hydrology. The EA/NRW data is reported to a distance of 250m from the edge of the site polygon and details both Zone 2 (extreme) and Zone 3 flood extents, as well as flood defences, flood water storage areas and areas benefiting from flood defences. The CEH data is reported to a distance of 250m from the edge of the site polygon and covers flood data for Scotland, divided into levels based on the frequency and magnitude of a predicted 100 year term. All data sets within this section are plotted and feature on the EA / NRW / CEH Flood Data (1:10,000) map. For added value, OS Contour data is also plotted, detailing contours, spot heights and land water boundaries.	
JBA Flood Data	1
This section contains the Comprehensive Flood Map ("CFM") data from JBA Risk Management Limited. The data is based upon the likelihood of a flood occurrence for up to 4 flood return periods depending on the type of flooding; these being 75 years, 100 years, 200 years and 1000 years. Each layer being modelled at a 5m cell resolution. Each return period is depicted on a separate 1:10,000 scale map and reports features to a distance of 250m in the datasheet from the edge of the site polygon. For each return period the following three sources of flooding are identified, surface water or pluvial flooding, undefended river flooding or fluvial flooding and undefended coastal flooding. In each case the extent of the flooding source is displayed with the associated depth range. In addition, a 1:10,000 scale map depicting flooding from a Canal Failure and a coverage check for this dataset is included. Where coverage exists, information is reported in the datasheet where the site could be affected by flooding that results from a dam breach. For added value, OS Contour data is also plotted, detailing contours, spot heights and land water boundaries.	
BGS Flood Data	6
This section contains two BGS data sets; namely Geological Indicators of Flooding and Groundwater Flooding Susceptibility, both of which report features out to a possible 1000m, with coverage in England, Wales and Scotland. Each data set is plotted on a separate BGS Flood Data (1:50,000) map.	
GeoSmart Information Groundwater Flood Data	12
This section contains data provided by GeoSmart Information who, building on their expertise, have developed algorithms and calibrated predictions of the risk of groundwater flooding occurring in Great Britain. The resulting map, classifies groundwater flood risk for each 5m x 5m into four categories, negligible, low, moderate and high. These classifications are based on the level of risk, combining severity and uncertainty that a site will suffer groundwater flooding within a return period of about 200 years.	
OS Water Network Data	14
This section details the MasterMap Water Network data sourced from the Ordnance Survey. The OS MasterMap Water Network data details a network representing the watercourse within Great Britain. The OS Water Network Lines data set details the approximate central alignment of a watercourse, including rivers, lakes and canals. The OS Water Network Nodes data set details features that represent a river's source, end, a junction where three or more links meet, and places where the real world related attribution changes; for example a watercourse becoming tidal. The data sets within this section are plotted and feature on the OS Water Network Map (1:10,000) . For added value, OS Contour data is also plotted, detailing contours, spot heights and land water boundaries.	

EA/NRW Historic Flood Events Data	20
This section details Historic Flood data sourced from the Environment Agency/Natural Resources Wales and from data held by Landmark. The EA/NRW Historic Flood Events data is reported to a distance of 1000m from the edge of the site polygon and details recorded historic flood events from 1703 to October 2008. The data also contains information on the source and cause of the flood, and how the flood outline was established. Also included in this section is Landmark's Historical Flood Liabilities data set, which identifies areas that are liable to flood based on systematic analysis of historical mapping dating back to the mid 19th century. Both data sets within this section are plotted and feature on the EA/NRW Historical Flood (1:10,000) map. For added value, OS Contour data is also plotted, detailing contours, spot heights and land water boundaries.	
EA/NRW RoFRS Data	21
This section details the Risk of Flooding from Rivers and Sea (RoFRS) data sourced from the Environment Agency/Natural Resources Wales and is reported to a distance of 1000m from the edge of the site polygon. The RoFRS data provides an indication of areas of land at risk of flooding from rivers and the sea. These areas of land, called impacted cells, are represented as 50 metre squares, or smaller areas where a square is intersected by a river or coastline. The average height information of the impacted cell, modelled river and sea levels and information about over 200,000 flood defences are used as inputs to a computer flood model run by the Environment Agency/Natural Resources Wales. The model compares the probability that the flood defences will overtop or breach and the distance of the impact cell from the river or the sea for 40 scenarios for probabilities of between 100% to 0.1%. The results are then consolidated to calculate a single probability category for each impacted cell. These results have been validated by local staff using their local knowledge and expertise. RoFRS is a national flood risk assessment and does not contain information about property thresholds. Due to variations in the input data and the performance of the computer flood model at particular locations, the resulting category of an impacted cell should only be used at a specific study scale. In certain areas it would only be appropriate to compare risks between towns and counties whereas in other areas they would be more suitable for understanding risk at a street level. The level of suitability for a particular cell is indicated by the cell's suitability scale. The data within this section is plotted and feature on the EA/NRW RoFRS Data (1:50,000) map. This dataset is not available in Scotland.	
Flood Insurance Risk Data	25
This section contains flood risk data from Crawford and Company. This dataset is not plotted on any of the associated Flood maps. Crawford & Co have generated an Insurance Claims rating for Flood Risk. The risk is determined by comparing the number of flood insurance claims made to the number of properties in the postcode sector. The data will also include flood claims from domestic accidents or blocked drains, as well as flooding from river or tidal events. Flood insurance claim ratings are reported for the site only.	
Data Currency	26
Data Suppliers	29
Useful Contacts	30

Report Version v53.0

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m
EA / NRW / CEH Flood Data					
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
JBA Flood Data					
JBA 75 Year Return (undefended) - Pluvial	pg 1	3	18	n/a	n/a
JBA 75 Year Return (undefended) - Fluvial				n/a	n/a
JBA 75 Year Return (undefended) - Coastal				n/a	n/a
JBA 100 Year Return (undefended) - Fluvial				n/a	n/a
JBA 100 Year Return (undefended) - Coastal				n/a	n/a
JBA 200 Year Return (undefended) - Pluvial	pg 2	4	25	n/a	n/a
JBA 200 Year Return (undefended) - Fluvial				n/a	n/a
JBA 200 Year Return (undefended) - Coastal				n/a	n/a
JBA 1000 Year Return (undefended) - Pluvial	pg 3	3	34	n/a	n/a
JBA 1000 Year Return (undefended) - Fluvial				n/a	n/a
JBA 1000 Year Return (undefended) - Coastal				n/a	n/a
JBA Canal Failure					
JBA Dam Break	pg 5				1
BGS Flood Data					
BGS Geological Indicators of Flooding	pg 6			2	2
BGS Groundwater Flooding Susceptibility	pg 6	3	17	18	85
GeoSmart Information Groundwater Flood					
GeoSmart Information Groundwater Flood Risk	pg 12	1			26
OS Water Network Data					
OS Water Network Lines	pg 14			6	30
OS Water Network Nodes	pg 17			4	28
EA/NRW Historic Flood Events Data					
Historic Flood Events	pg 20				1
Historical Flood Liabilities					
EA/NRW RoFRS Data					
RoFRS - Risk of Flooding from Rivers and Sea	pg 21			12	33
Flood Insurance Risk Data					
Postcode Sector Flood Insurance Claim Ratings	pg 25	1	n/a	n/a	n/a

Report Version v53.0

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SW (SW)	0	2	302140 515075
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	0	2	302148 515075
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	0	2	302155 515055
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	101	2	302110 515240
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.3m and Less than or equal to 1.0m	A13NW (N)	110	2	302125 515255
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.3m and Less than or equal to 1.0m	A13NW (N)	132	2	302145 515280
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	142	2	302100 515280
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	148	2	302095 515285
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 1.0m	A13NW (N)	159	2	302130 515305
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 1.0m	A13NW (N)	163	2	302135 515310
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	164	2	302090 515300
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	173	2	302135 515320
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	178	2	302090 515315
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	181	2	302095 515320
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	185	2	302160 514860
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	186	2	302180 514860
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	192	2	302190 514855
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	193	2	302130 515340
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	199	2	302125 515345
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SW (SW)	216	2	301980 514905
	JBA 75 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SW (SW)	224	2	301990 514890
	JBA 75 Year Return (undefended) - Fluvial None				
	JBA 75 Year Return (undefended) - Coastal None				

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	JBA 100 Year Return (undefended) - Fluvial None				
	JBA 100 Year Return (undefended) - Coastal None				
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SW (SW)	0	2	302140 515075
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	0	2	302148 515075
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	0	2	302155 515055
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	0	2	302160 515050
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NE (N)	89	2	302170 515235
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.3m and Less than or equal to 1.0m	A13NW (N)	103	2	302115 515245
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	117	2	302105 515255
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NE (N)	123	2	302165 515270
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	124	2	302110 515265
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	135	2	302105 515275
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NE (N)	138	2	302160 515285
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NE (N)	142	2	302155 515290
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	142	2	302100 515280
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NE (N)	147	2	302150 515295
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 1.0m	A13NW (N)	151	2	302120 515295
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	155	2	302090 515290
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	157	2	302145 515305
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 1.0m	A13NW (N)	159	2	302105 515300
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	166	2	302085 515300
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	185	2	302160 514860
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	185	2	302170 514860

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	188	2	302135 515335
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	189	2	302100 515330
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	192	2	302190 514855
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	193	2	302105 515335
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	197	2	302110 515340
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	199	2	302125 515345
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	215	2	302175 514830
	JBA 200 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SW (SW)	216	2	301980 514905
	JBA 200 Year Return (undefended) - Fluvial None				
	JBA 200 Year Return (undefended) - Coastal None				
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	0	2	302148 515075
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	0	2	302155 515055
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	0	2	302160 515050
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SW (S)	32	2	302130 515030
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SW (S)	51	2	302135 515000
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SW (S)	67	2	302130 514985
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SW (S)	70	2	302135 514980
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NE (N)	84	2	302165 515230
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	88	2	302105 515225
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NE (N)	92	2	302148 515240
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.3m and Less than or equal to 1.0m	A13NE (N)	93	2	302160 515240
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	114	2	302100 515250
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	121	2	302105 515260

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NE (N)	124	2	302170 515270
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 1.0m	A13NW (N)	132	2	302115 515275
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NE (N)	133	2	302165 515280
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NE (N)	138	2	302160 515285
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.3m and Less than or equal to 1.0m	A13NW (N)	157	2	302115 515300
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.3m and Less than or equal to 1.0m	A13NW (N)	160	2	302120 515305
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	161	2	302085 515295
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.3m and Less than or equal to 1.0m	A13NW (N)	163	2	302140 515310
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.3m and Less than or equal to 1.0m	A13NW (N)	164	2	302125 515310
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 1.0m	A13NW (N)	170	2	302100 515310
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	178	2	302135 515325
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	183	2	302090 515320
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	185	2	302160 514860
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	185	2	302170 514860
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	186	2	302095 515325
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.3m and Less than or equal to 1.0m	A13NW (N)	188	2	302105 515330
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	189	2	302100 515330
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SE (S)	192	2	302190 514855
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	193	2	302140 515340
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	193	2	302105 515335
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	205	2	302120 515350
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SW (SW)	206	2	301975 514920

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13NW (N)	209	2	302125 515355
	JBA 1000 Year Return (undefended) - Pluvial Flood Depth: Greater than 0.1m and Less than or equal to 0.3m	A13SW (SW)	216	2	301980 514905
	JBA 1000 Year Return (undefended) - Fluvial None				
	JBA 1000 Year Return (undefended) - Coastal None				
	JBA Canal Failure Coverage Coverage: This area has not been mapped for risk of flooding from canal or aqueduct failure or breach.	A13SE (SE)	0	2	302148 515094
	JBA Canal Failure None				
	JBA Dam Break Coverage Coverage: This area has been mapped for flooding from dam or reservoir embankment failure or breach.	A13SE (SE)	0	2	302148 515094
	JBA Dam Break Assessment: This area is regarded as being at some risk of flooding in the event of an instantaneous catastrophic breach of dam or reservoir embankment. Flooded Area Size: 787525m2	A8SE (S)	903	2	302235 514145

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Geological Indicators of Flooding Flooding Type: Inland Flooding Flood Potential: Higher flood potential from rivers: the first areas to experience the effects of inland flooding in a river catchment. Code:	A8NE (S)	289	3	302177 514756
	BGS Geological Indicators of Flooding Flooding Type: Inland Flooding Flood Potential: Higher flood potential from rivers: the first areas to experience the effects of inland flooding in a river catchment. Code:	A13NE (NE)	309	3	302378 515362
	BGS Geological Indicators of Flooding Flooding Type: Inland Flooding Flood Potential: Higher flood potential from rivers: the first areas to experience the effects of inland flooding in a river catchment. Code:	A12NW (W)	921	3	301234 515428
	BGS Geological Indicators of Flooding Flooding Type: Inland Flooding Flood Potential: Lower flood potential from rivers: areas affected by secondary flooding in extreme cases as a result of a prolonged flood event. Code:	A9NE (SE)	945	3	303041 514644
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	0	3	302148 515094
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	0	3	302150 515094
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	0	3	302148 515050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	2	3	302148 515150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NE (NE)	34	3	302200 515150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (W)	42	3	302050 515100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	45	3	302148 515000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	52	3	302148 515200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	57	3	302050 515050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (NW)	73	3	302100 515200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SW (SW)	99	3	302050 515000
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (S)	150	3	302200 514900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	160	3	302200 515300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13NW (NW)	211	3	301950 515250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	212	3	302300 515300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (E)	214	3	302400 515000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (N)	225	3	302250 515350

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NW (N)	226	3	302050 515350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A13SE (SE)	236	3	302400 514950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	245	3	302350 515300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A13NE (NE)	293	3	302300 515400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (W)	297	3	301800 515150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A13NE (NE)	302	3	302450 515250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	307	3	302250 514750
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (E)	308	3	302500 515150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (E)	324	3	302500 515200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (E)	390	3	302550 515250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	393	3	301700 515050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	395	3	302150 514650
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12NE (W)	396	3	301700 515150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	397	3	302200 514650
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (W)	401	3	301700 515000
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SW (N)	415	3	302050 515550
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (W)	443	3	301650 515050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	450	3	301650 515000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A17SE (NW)	493	3	301750 515450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A8NE (S)	497	3	302200 514550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	499	3	301600 515000
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (E)	505	3	302700 515150

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	510	3	301600 514950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NW (E)	515	3	302700 515200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NE (SE)	526	3	302450 514600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	545	3	302148 514500
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (W)	548	3	301550 515000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	559	3	301550 514950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18SW (N)	561	3	302050 515700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SE (W)	573	3	301550 514900
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NE (S)	575	3	302350 514500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8NW (S)	598	3	302100 514450
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NW (E)	604	3	302800 515150
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8NW (S)	616	3	302000 514450
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A19SW (NE)	636	3	302650 515550
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A19SW (NE)	644	3	302700 515500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SW (S)	648	3	302100 514400
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18NE (N)	652	3	302150 515800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SE (SW)	658	3	301500 514800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SE (S)	701	3	302250 514350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A18NE (N)	702	3	302150 515850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SW (SW)	703	3	301450 514800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SW (S)	704	3	302050 514350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A17SE (NW)	710	3	301550 515550

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SE (S)	719	3	302350 514350
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SE (S)	746	3	302200 514300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SE (S)	750	3	302250 514300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SW (W)	754	3	301350 514950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8SE (S)	758	3	302300 514300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NW (W)	758	3	301350 515250
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8SW (S)	762	3	302000 514300
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NE (E)	782	3	302950 515300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NW (W)	793	3	301300 515150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SE (S)	795	3	302150 514250
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SW (W)	796	3	301350 514800
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SE (S)	796	3	302200 514250
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8SE (S)	800	3	302250 514250
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18NE (N)	802	3	302148 515950
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A19NW (NE)	808	3	302550 515850
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A17SE (NW)	811	3	301550 515700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A17SW (NW)	819	3	301450 515600
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8SW (S)	822	3	301950 514250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12NW (W)	841	3	301250 515100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8SE (S)	846	3	302200 514200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A9NE (SE)	847	3	302900 514600
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SE (E)	850	3	303050 515050

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SE (S)	850	3	302250 514200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14SE (E)	853	3	303050 515000
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18NW (N)	857	3	301850 515950
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A9NE (SE)	863	3	302950 514650
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A9NE (E)	864	3	303000 514750
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A8SE (S)	866	3	302350 514200
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A9NE (SE)	869	3	302850 514500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SE (E)	879	3	303050 514850
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A9NE (SE)	884	3	303000 514700
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18NE (N)	888	3	302400 516000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A9NE (SE)	888	3	302950 514600
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SW (W)	891	3	301200 515094
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SE (E)	894	3	303050 514800
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A12SW (W)	895	3	301200 515000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SE (E)	900	3	303100 515050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SE (E)	903	3	303100 515000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A9NE (SE)	906	3	303000 514650
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A9NE (SE)	907	3	302900 514500
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18NE (N)	915	3	302300 516050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14SE (E)	917	3	303100 514900
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18NE (N)	924	3	302350 516050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A8SE (S)	939	3	302450 514150

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A12SW (W)	941	3	301150 515094
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18NE (N)	952	3	302148 516100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A18NE (N)	952	3	302150 516100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A9SW (S)	955	3	302500 514150
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A14NE (E)	956	3	303100 515400
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18NE (N)	958	3	302250 516100
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A14NE (E)	958	3	303150 515200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NE (E)	965	3	303150 515250
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A19NW (N)	968	3	302500 516050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A9SE (SE)	972	3	302850 514350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A18NE (N)	973	3	302350 516100
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A14NE (E)	976	3	303150 515300
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding to Occur at Surface	A14NE (E)	988	3	303150 515350
	BGS Groundwater Flooding Susceptibility Flooding Type: Limited Potential for Groundwater Flooding to Occur	A11SE (W)	992	3	301100 515050
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11SE (W)	995	3	301100 515000
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A11NE (W)	997	3	301100 515200
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A15SW (E)	1000	3	303200 515094
	BGS Groundwater Flooding Susceptibility Flooding Type: Potential for Groundwater Flooding of Property Situated Below Ground Level	A15SW (E)	1000	3	303200 515050

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	GeoSmart Information Groundwater Flood Data Risk: Negligible Risk Risk Details: There is a negligible risk of groundwater flooding in this area and any groundwater flooding incidence has a chance of less than 1 in 100 (<1%) probability of occurrence.	A13SE (SE)	0	2	302148 515094
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A8NW (S)	630	2	301985 514440
	GeoSmart Information Groundwater Flood Data Risk: Moderate Risk Risk Details: There is a moderate risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A8SW (S)	656	2	301960 514420
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A7NE (SW)	762	2	301480 514635
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A7NE (SW)	774	2	301480 514615
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A7NW (SW)	792	2	301450 514625
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A8SW (S)	811	2	302125 514235
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A7NW (SW)	814	2	301400 514660
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A8SE (S)	894	2	302245 514155
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A8SE (S)	902	2	302215 514145
	GeoSmart Information Groundwater Flood Data Risk: Moderate Risk Risk Details: There is a moderate risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A8SE (S)	903	2	302230 514145
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A9NE (SE)	904	2	302965 514595
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A8SE (S)	906	2	302200 514140
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A8SE (S)	911	2	302195 514135
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A8SE (S)	915	2	302185 514130
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A8SE (S)	917	2	302360 514150

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A9NE (SE)	922	2	302895 514470
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A9SE (SE)	952	2	302890 514420
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A8SE (S)	957	2	302430 514125
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A9SE (SE)	969	2	302885 514390
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A9SE (SE)	972	2	302880 514380
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A9SE (SE)	972	2	302875 514375
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A8SE (S)	980	2	302475 514115
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A3NW (S)	984	2	302070 514065
	GeoSmart Information Groundwater Flood Data Risk: Negligible Risk Risk Details: There is a negligible risk of groundwater flooding in this area and any groundwater flooding incidence has a chance of less than 1 in 100 (<1%) probability of occurrence.	A11NE (W)	999	2	301122 515331
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A11NE (W)	999	2	301100 515220
	GeoSmart Information Groundwater Flood Data Risk: Low Risk Risk Details: There is a low risk of groundwater flooding in this area with a chance of greater than 1 in 100 (>1%) probability of occurrence.	A11NE (W)	999	2	301105 515250

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	OS Water Network Lines Watercourse Name: Nor Beck Watercourse Form: Inland river Watercourse Length: 211.9 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18SE (NE)	379	4	302373 515455
2	OS Water Network Lines Watercourse Name: Nor Beck Watercourse Form: Inland river Watercourse Length: 158.6 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18SW (N)	435	4	302020 515562
3	OS Water Network Lines Watercourse Name: Nor Beck Watercourse Form: Inland river Watercourse Length: 170.7 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18SW (N)	441	4	302002 515562
4	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 340.6 Watercourse Level: Underground Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A8NE (SE)	450	4	302390 514653
5	OS Water Network Lines Watercourse Name: Nor Beck Watercourse Form: Inland river Watercourse Length: 116.7 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18SE (N)	495	4	302264 515629
6	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 492.2 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18SE (N)	495	4	302264 515629
7	OS Water Network Lines Watercourse Name: Nor Beck Watercourse Form: Inland river Watercourse Length: 44.0 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18SW (N)	511	4	302111 515657
8	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 573.3 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18SW (N)	515	4	302088 515659
9	OS Water Network Lines Watercourse Name: Nor Beck Watercourse Form: Inland river Watercourse Length: 7.8 Watercourse Level: Underground Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18SW (N)	523	4	302127 515670

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
10	OS Water Network Lines Watercourse Name: Nor Beck Watercourse Form: Inland river Watercourse Length: 34.7 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18SW (N)	525	4	302135 515672
11	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 32.0 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18SE (N)	533	4	302168 515680
12	OS Water Network Lines Watercourse Name: Nor Beck Watercourse Form: Inland river Watercourse Length: 77.8 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18SW (NW)	569	4	301844 515627
13	OS Water Network Lines Watercourse Name: Nor Beck Watercourse Form: Inland river Watercourse Length: 105.4 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A17SE (NW)	634	4	301773 515657
14	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 233.4 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A8SE (S)	666	4	302214 514382
15	OS Water Network Lines Watercourse Name: Nor Beck Watercourse Form: Inland river Watercourse Length: 751.5 Watercourse Level: Underground Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A17SE (NW)	706	4	301677 515671
16	OS Water Network Lines Watercourse Name: Bowthorn Beck Watercourse Form: Inland river Watercourse Length: 772.2 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A17SE (NW)	715	4	301680 515686
17	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Lake Watercourse Length: 16.1 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A14NE (E)	752	4	302907 515333
18	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 388.8 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A14NE (E)	766	4	302923 515330

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
19	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 2.8 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A8SW (S)	866	4	302107 514181
20	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 37.1 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A8SW (S)	869	4	302105 514178
21	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 25.6 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18NW (N)	886	4	301918 516002
22	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 3.0 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A8SW (S)	899	4	302094 514149
23	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 3.2 Watercourse Level: Underground Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18NW (N)	900	4	301894 516010
24	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 17.5 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A8SW (S)	900	4	302091 514147
25	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 8.5 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A18NW (N)	902	4	301890 516011
26	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 15.6 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A19NW (NE)	904	4	302570 515948
27	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 23.4 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A19NW (NE)	904	4	302570 515948

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
28	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 4.6 Watercourse Level: Underground Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A19NW (NE)	910	4	302561 515960
29	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 161.5 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A19NW (NE)	912	4	302558 515964
30	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 56.6 Watercourse Level: Underground Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A8SW (S)	915	4	302083 514133
31	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 66.4 Watercourse Level: Underground Primacy: 2 Permanent: True Catchment Name: Ehen-Calder	A8SW (S)	915	4	302083 514133
32	OS Water Network Lines Watercourse Name: River Ehen Watercourse Form: Inland river Watercourse Length: 572.1 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A8SE (S)	917	4	302229 514130
33	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 121.0 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A7NW (SW)	919	4	301418 514465
34	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 117.5 Watercourse Level: Underground Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A3NW (S)	970	4	302065 514079
35	OS Water Network Lines Watercourse Name: Nor Beck Watercourse Form: Inland river Watercourse Length: 167.0 Watercourse Level: On ground surface Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A12NW (W)	992	4	301137 515362
36	OS Water Network Lines Watercourse Name: Not Supplied Watercourse Form: Inland river Watercourse Length: 102.9 Watercourse Level: Underground Primacy: 1 Permanent: True Catchment Name: Ehen-Calder	A12NW (W)	992	4	301137 515362
37	OS Water Network Nodes Hydranode Source Category:	A18SE (NE)	381	4	302376 515455

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
38	OS Water Network Nodes Hydronode Pseudo Category:	A18SW (N)	441	4	302002 515562
39	OS Water Network Nodes Hydronode Source Category:	A8NE (SE)	450	4	302390 514653
40	OS Water Network Nodes Hydronode Junction Category:	A18SE (N)	495	4	302264 515629
41	OS Water Network Nodes Hydronode Junction Category:	A18SW (N)	515	4	302088 515659
42	OS Water Network Nodes Hydronode Pseudo Category:	A18SW (N)	523	4	302127 515670
43	OS Water Network Nodes Hydronode Pseudo Category:	A18SW (N)	525	4	302135 515672
44	OS Water Network Nodes Hydronode Junction Category:	A18SE (N)	533	4	302168 515680
45	OS Water Network Nodes Hydronode Source Category:	A18SE (N)	556	4	302191 515702
46	OS Water Network Nodes Hydronode Pseudo Category:	A18SW (NW)	569	4	301844 515627
47	OS Water Network Nodes Hydronode Pseudo Category:	A17SE (NW)	634	4	301773 515657
48	OS Water Network Nodes Hydronode Pseudo Category:	A8SE (S)	666	4	302214 514382
49	OS Water Network Nodes Hydronode Junction Category:	A17SE (NW)	715	4	301680 515686
50	OS Water Network Nodes Hydronode Source Category:	A14NE (E)	752	4	302907 515333
51	OS Water Network Nodes Hydronode Pseudo Category:	A14NE (E)	766	4	302923 515330
52	OS Water Network Nodes Hydronode Pseudo Category:	A8SW (S)	866	4	302107 514181
53	OS Water Network Nodes Hydronode Pseudo Category:	A8SW (S)	869	4	302105 514178
54	OS Water Network Nodes Hydronode Outlet Category:	A18NW (N)	886	4	301918 516002
55	OS Water Network Nodes Hydronode Pseudo Category:	A8SW (S)	899	4	302094 514149
56	OS Water Network Nodes Hydronode Pseudo Category:	A18NW (N)	900	4	301894 516010
57	OS Water Network Nodes Hydronode Pseudo Category:	A8SW (S)	900	4	302091 514147

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
58	OS Water Network Nodes Hydronode Pseudo Category:	A18NW (N)	902	4	301890 516011
59	OS Water Network Nodes Hydronode Junction Category:	A19NW (NE)	904	4	302570 515948
60	OS Water Network Nodes Hydronode Source Category:	A18NW (N)	906	4	301882 516013
61	OS Water Network Nodes Hydronode Pseudo Category:	A19NW (NE)	910	4	302561 515960
62	OS Water Network Nodes Hydronode Pseudo Category:	A19NW (NE)	912	4	302558 515964
63	OS Water Network Nodes Hydronode Junction Category:	A8SW (S)	915	4	302083 514133
64	OS Water Network Nodes Hydronode Source Category:	A7NW (SW)	919	4	301418 514465
65	OS Water Network Nodes Hydronode Source Category:	A19NW (NE)	925	4	302588 515962
66	OS Water Network Nodes Hydronode Junction Category:	A3NW (S)	970	4	302065 514079
67	OS Water Network Nodes Hydronode Source Category:	A23SW (N)	978	4	302063 516122
68	OS Water Network Nodes Hydronode Junction Category:	A12NW (W)	992	4	301137 515362

EA/NRW Historic Flood Events Data

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
69	Historic Flood Events Flood Event Type: Historic Flood Event - Fluvial Flooding Cause: Channel Capacity Exceeded (no raised defences) Source: Environment Agency, Head Office Flood Event Start Date: 5th November 1999 Flood Event End Date: 5th November 1999	A17SW (NW)	867	1	301307 515460

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Assessment: County to Town Suitability Scale: Environment Agency, Head Office Source:	A18SW (N)	447	1	301987 515564
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (N)	447	1	301987 515563
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (N)	450	1	301983 515565
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (N)	454	1	301978 515567
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (N)	458	1	301973 515569
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (N)	461	1	301969 515571
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (N)	465	1	301964 515573
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (N)	469	1	301959 515575
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (N)	473	1	301954 515577
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (N)	476	1	301950 515579
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (NW)	480	1	301945 515581
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (NW)	488	1	301935 515585
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (NW)	563	1	301876 515639
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Assessment: Town to Street Suitability Scale: Environment Agency, Head Office Source:	A18SW (NW)	586	1	301850 515650

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Suitability Scale: Town to Street Source: Environment Agency, Head Office	A17SE (NW)	623	1	301783 515650
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: Town to Street Source: Environment Agency, Head Office	A18SW (NW)	633	1	301842 515700
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A8SE (S)	664	1	302215 514384
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: Town to Street Source: Environment Agency, Head Office	A8SE (S)	666	1	302208 514380
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A8SE (S)	669	1	302216 514379
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: Town to Street Source: Environment Agency, Head Office	A17SE (NW)	702	1	301700 515685
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A17SE (NW)	718	1	301681 515690
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A17SE (NW)	722	1	301675 515691
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: Town to Street Source: Environment Agency, Head Office	A17SE (NW)	726	1	301746 515750
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Low - Less than 1 in 100 (1%) but greater than or equal to 1 in 1,000 (0.1%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A8SE (S)	760	1	302200 514286
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: Town to Street Source: Environment Agency, Head Office	A17SW (NW)	867	1	301307 515460
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A8SW (S)	875	1	302104 514171
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A8SE (S)	905	1	302248 514144
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A17SW (NW)	920	1	301266 515498

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A17SW (NW)	927	1	301260 515501
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A8SE (S)	932	1	302235 514116
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: Town to Street Source: Environment Agency, Head Office	A17SW (NW)	932	1	301250 515492
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A8SE (S)	944	1	302362 514122
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A8SE (S)	955	1	302378 514114
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A8SE (S)	960	1	302383 514110
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A17SW (W)	963	1	301200 515456
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A8SE (S)	965	1	302390 514106
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Low - Less than 1 in 100 (1%) but greater than or equal to 1 in 1,000 (0.1%) chance in any given year Suitability Scale: Town to Street Source: Environment Agency, Head Office	A12NW (W)	965	1	301161 515350
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A8SE (S)	971	1	302431 514111
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Suitability Scale: Town to Street Source: Environment Agency, Head Office	A12NW (W)	979	1	301135 515300
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Suitability Scale: Town to Street Source: Environment Agency, Head Office	A11NE (W)	986	1	301120 515262
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A8SE (S)	991	1	302415 514086
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk Assessment: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A12NW (W)	992	1	301139 515370

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: Medium - Less than 1 in 30 (3.3%) but greater than or equal to 1 in 100 (1%) Assessment: chance in any given year Suitability Scale: County to Town Source: Environment Agency, Head Office	A12NW (W)	995	1	301133 515361
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Assessment: Suitability Scale: Town to Street Source: Environment Agency, Head Office	A11NE (W)	998	1	301110 515274
	Risk of Flooding from Rivers and Sea (RoFRS) Flood Risk: High - Greater than or equal to 1 in 30 (3.3%) chance in any given year Assessment: Suitability Scale: County to Town Source: Environment Agency, Head Office	A11NE (W)	999	1	301110 515277

Flood Insurance Risk Data

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Postcode Sector Flood Insurance Claim Ratings Insurance Rating: Low Flood Insurance Claim Rating Postcode Sector: CA25 5	A13SE (SE)	0	2	302148 515094

EA / NRW / CEH Flood Data	Version	Update Cycle
Extreme Flooding from Rivers or Sea without Defences Environment Agency - Head Office	February 2022	Quarterly
Flooding from Rivers or Sea without Defences Environment Agency - Head Office	February 2022	Quarterly
Areas Benefiting from Flood Defences Environment Agency - Head Office	February 2022	Quarterly
Flood Water Storage Areas Environment Agency - Head Office	February 2022	Quarterly
Flood Defences Environment Agency - Head Office	February 2022	Quarterly
EA / NRW Surface Water Flood Data	Version	Update Cycle
Surface Water 1 in 30 year Flood Depth Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 100 year Flood Depth Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 1000 year Flood Depth Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 30 year Flood Velocity Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 100 year Flood Velocity Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 1000 year Flood Velocity Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 30 year Flood Flow Direction 25m Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 100 year Flood Flow Direction 25m Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 1000 year Flood Flow Direction 25m Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 30 year Flood Hazard Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 100 year Flood Hazard Environment Agency - Head Office	May 2018	Annually
Surface Water 1 in 1000 year Flood Hazard Environment Agency - Head Office	May 2018	Annually
Surface Water Suitability Environment Agency - Head Office	February 2016	Annually

JBA Flood Data	Version	Update Cycle
JBA 75 Year Return (undefended) - Pluvial JBA Risk Management Limited	November 2020	Annually
JBA 75 Year Return (undefended) - Fluvial JBA Risk Management Limited	November 2020	Annually
JBA 75 Year Return (undefended) - Coastal JBA Risk Management Limited	November 2020	Annually
JBA 100 Year Return (undefended) - Fluvial JBA Risk Management Limited	November 2020	Annually
JBA 100 Year Return (undefended) - Coastal JBA Risk Management Limited	November 2020	Annually
JBA 200 Year Return (undefended) - Pluvial JBA Risk Management Limited	November 2020	Annually
JBA 200 Year Return (undefended) - Fluvial JBA Risk Management Limited	November 2020	Annually
JBA 200 Year Return (undefended) - Coastal JBA Risk Management Limited	November 2020	Annually
JBA 1000 Year Return (undefended) - Pluvial JBA Risk Management Limited	November 2020	Annually
JBA 1000 Year Return (undefended) - Fluvial JBA Risk Management Limited	November 2020	Annually
JBA 1000 Year Return (undefended) - Coastal JBA Risk Management Limited	November 2020	Annually
JBA Canal Failure JBA Risk Management Limited	October 2017	Annually
JBA Dam Break JBA Risk Management Limited	October 2017	Annually
BGS Flood Data	Version	Update Cycle
BGS Geological Indicators of Flooding British Geological Survey - National Geoscience Information Service	October 2013	As notified
BGS Groundwater Flooding Susceptibility British Geological Survey - National Geoscience Information Service	May 2013	As notified
GeoSmart Information Groundwater Flooding Data	Version	Update Cycle
GeoSmart Information Groundwater Flood Risk GeoSmart Information Ltd	October 2020	As notified
OS Water Network Data	Version	Update Cycle
OS Water Network Lines Ordnance Survey	January 2022	Quarterly
OS Water Network Nodes Ordnance Survey	October 2021	Quarterly
EA/NRW Historic Flood Events Data	Version	Update Cycle
Historic Flood Events Environment Agency - Head Office	February 2022	Quarterly
Historical Flood Liabilities Landmark Information Group Limited	December 1999	Not Applicable

EA/NRW Risk of Flooding from Rivers and Sea (RoFRS)	Version	Update Cycle
RoFRS - Risk of Flooding from Rivers and Sea Environment Agency - Head Office	March 2022	Annually
Flood Insurance Risk Data	Version	Update Cycle
Postcode Sector Flood Insurance Claim Ratings Crawford and Company	April 2020	Quarterly

A selection of organisations who provide data within this report

Data Supplier	Data Supplier Logo
Ordnance Survey	
Environment Agency	
Natural Resources Wales	
Centre for Ecology and Hydrology	
British Geological Survey	
GeoSmart Information	
JBA Risk Management	

Contact	Name and Address	Contact Details
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2	Landmark Information Group Limited Imperium, Imperial Way, Reading, Berkshire, RG2 0TD	Telephone: 0844 844 9966 Fax: 0844 844 9951 Email: helpdesk@landmark.co.uk Website: www.landmark.co.uk
3	British Geological Survey - Enquiry Service British Geological Survey, Environmental Science Centre, Keyworth, Nottingham, Nottinghamshire, NG12 5GG	Telephone: 0115 936 3143 Fax: 0115 936 3276 Email: enquiries@bgs.ac.uk Website: www.bgs.ac.uk
4	Ordnance Survey Adanac Drive, Southampton, Hampshire, SO16 0AS	Telephone: 03456 05 05 05 Email: customerservices@ordnancesurvey.co.uk Website: www.ordnancesurvey.gov.uk
5	Environment Agency - Head Office Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol, Avon, BS32 4UD	Telephone: 01454 624400 Fax: 01454 624409

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