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# FLOOD RISK ASSESSMENT

RESIDENTIAL DEVELOPMENT  
CARN THOMAS, HUGH TOWN,  
ST MARY'S, ISLES OF SCILLY  
CORNWALL, UK

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AUGUST 2023 | PROJECT REF: 21185

## DOCUMENT CONTROL SHEET

To ensure this is the latest issue, a control table can be found below with updates identified.

Document Control				
Client	Job Number			
Livewest	21185			
Version	Date	Description	Prepared By	Checked By
A	28/03/2024	Suitable for issue to client.	MFS	MP

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## 1.0 INTRODUCTION

- 1.1 MBA Consulting's client is Livewest. This report is available to our client, their appointed advisors, and the local planning authority.
- 1.2 The client is proposing to develop 27 No. residential units including a mixture of 1 and 2 bedroom flats and 3 bedroom houses. The site will also include a car park, play areas, a solar field and grass open areas.
- 1.3 The Planning Practice Guidance to the National Planning Policy Framework dated December 2023 states that a Flood Risk Assessment (FRA) is required where a proposed development is greater than 1 ha in size or in an area where the Environment Agency (EA) have indicated there may be drainage problems, i.e. Critical Drainage Areas.
- 1.4 The area being developed is smaller than 1Ha and is not within a Critical Drainage Area. However, MBA Consulting have been commissioned to carry out a Flood Risk Assessment (FRA) to support the planning application for the proposed development.
- 1.5 This report therefore comprises a site-specific flood risk assessment and outlines the proposals for the disposal of surface water from the property.

## 2.0 SITE LOCATION AND DESCRIPTION

- 2.1 The site is located on the eastern edge of Hugh Town on St Mary's Island, within the Isles of Scilly (See Figure 1 on the next page). The site is situated at an approximate postcode of TR21 0JR, located at the Ordnance Survey Grid Reference (OSGR) SV 90697 10642.
- 2.2 It generally slopes from South to North. It is situated on high ground at approximately 27m AOD at its highest point on the south side of the site and at approximately 9m at its lowest point on the Northeastern boundary.
- 2.3 Currently the site consists of a stone gravel area, sections of dense vegetation and a small section of hardstanding in the form of a tennis court. The site was a school which has now been demolished.
- 2.4 The site area is approximately 0.62 hectares.

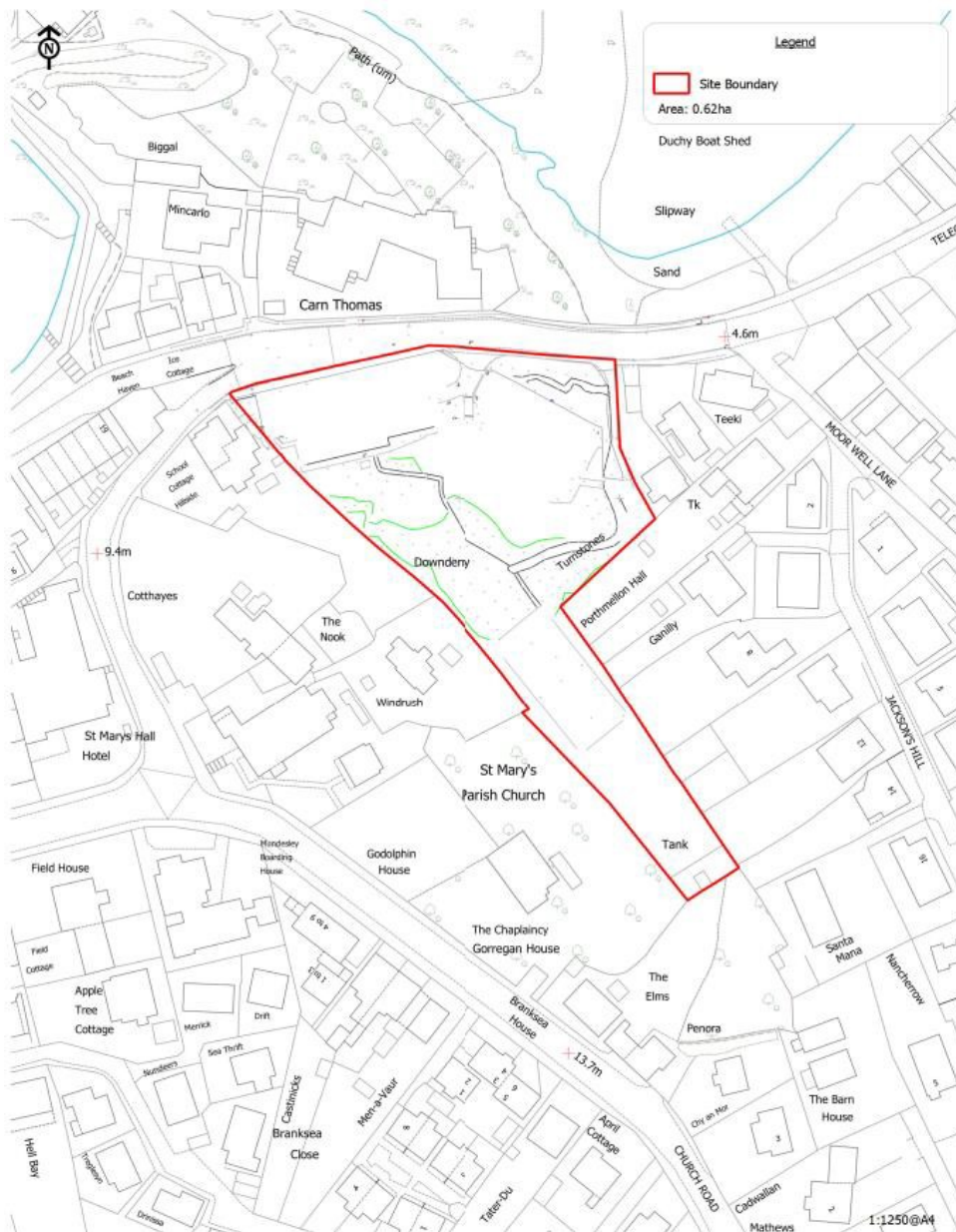


FIGURE 1.0 – SITE LOCATION  
NTS

### 3.0 EXISTING HYDROLOGY AND GEOLOGY

- 3.1 The EA Drainage Guidance for Cornwall v2 Jan 2010 and Cornwall Council's Strategic Flood Risk Assessment – Level 1 (SFRA1) does not identify the development to be within a Critical Drainage Area. Please refer to Appendix A.
- 3.2 The nearest recorded watercourse is 115m East of the site. The sea is located 30m North of the site at the closest point. The site is not known to be subject to groundwater or surface water flooding.
- 3.3 The site has been previously partially developed, as such there are areas of made ground. The site is shown to be underlain by the Isles of Scilly Intrusion with some localised deposits of Blown Sands and Tidal deposits, although it is suspected the tidal deposits are absent as these are likely to be restricted to the lowest topographical areas adjacent.

## 4.0 FLOOD RISK ASSESSMENT

- 4.1 The property has been assessed considering the Planning Policy Guidance to the National Planning Policy Framework and the Level 1 Strategic Flood Risk Assessment published in 2009 by Cornwall Council. The individual parameters are set out below.
- 4.2 The property is not in an area identified as a Critical Drainage Area in the Cornwall Council SFRA.
- 4.3 Flooding from rivers or from the sea**
- 4.4 The property is significantly elevated above sea level at 9m – 27m AOD. There is a low risk of the site flooding from the sea.
- 4.5 There are no rivers located close to the site. Flood risk from rivers is deemed to be low.
- 4.6 The Environment Agency has identified the property as an area which falls outside the extent of extreme flood (please refer to extracts from the Environment Agency Flood Risk mapping in Appendix B) at the time of their assessment of the likelihood of flooding. Generally, this means that the chance of flooding each year from rivers or the sea is 0.1% (1 in 1000) or less and places the development area wholly within Flood Zone 1. Appendix B also contains the surface water flood risk map from the Cornwall SFRA showing no significant risk of flooding to the property in the 1 in 100, and 1 in 1000 year storms.
- 4.7 Flooding from Land**
- 4.8 The site borders residential properties on its South, West, and East sides. These sides have a mixture of garden walls, fences, and thick vegetation to protect from overland flooding. The site slopes towards the north side of the site. The absence of any significant areas of hardstanding in these locations, and levels falling away from the site mean it is unlikely that overland exceedance flows will develop and cause flooding on site from these areas.
- 4.9 The northern boundary is adjacent to the public highway, Telegraph Road. The road is well maintained and from a high point in the middle of the northern boundary it slopes gently towards Town Beach to the west and towards Porth Mellon Beach to the east. There are no known flooding issues on site. Therefore, flooding from land is deemed to be low risk.



- 4.10 The Environment Agency has identified the property in flood zone 1, an area with low probability of flooding. The Environment Agency has produced mapping (Flood Map for Planning) illustrating the risk of flooding. Please refer to Appendix B for copy of EA Flood Mapping for Planning.
- 4.11 Design of the surface water disposal systems within the site will be required to comply with the current 'Drainage Guidance for Cornwall' published by the Environment Agency in 2015 (see section 5). This will ensure that the risk to adjacent property resulting from the development of this site is minimal.
- 4.12 Flooding from Groundwater**
- 4.13 Cornwall Council's interactive strategic flood risk mapping does not provide data for the Isles of Scilly. However, there are no recorded incidents of flooding of the site as a result of groundwater.
- 4.14 The proposed development of the existing property does not involve significant changes to existing ground levels and, therefore, there is low risk of flooding from groundwater.
- 4.15 Existing Ordnance Survey mapping and site survey information indicates that there are no known surface water features within close proximity to the development. Therefore, given the ground elevation above existing hydrological features, it is considered unlikely that the site will be subject to any flooding from groundwater.
- 4.16 Flooding from Sewers**
- 4.17 The South West Water (SWW) record is included in Appendix C. This shows a public combined sewer running underneath the road on the northern boundary of the site. The public combined sewer is well maintained by SWW. The topography of the site serves to prevent this sewer from flooding the site which is elevated above the sewer.
- 4.18 Recent changes to the application and charging process introduced by Ofwat mean SWW no longer review capacity and are obliged to fund any improvements required to the networks from the infrastructure charge imposed on any new development within their area of operation. Therefore, there is a low risk of flooding from public sewers as capacity must be made available.
- 4.19 Flooding from Reservoirs, Canals and Other Artificial Sources**
- 4.20 There are no reservoirs, canals, or other artificial sources in the vicinity of the property which might give rise to a risk of flooding.

## 5.0 SURFACE WATER DRAINAGE DESIGN STRATEGY

- 5.1 Design of the development's drainage infrastructure and Sustainable Urban Drainage System (SUDS) is to be carried out in line with best practice and to industry standard design procedures. A number of publications, including statutory instruments, design guidance and best practice guidance will apply to different components of the final infrastructure.
- 5.2 The sections below provide an overview of the design standards to be used on this project for various aspects of the surface water drainage design.
- 5.3 The design of the surface water drainage is required to follow the 'Drainage Guidance for Cornwall' issued by the Environment Agency (EA) published as part of the Cornwall Council Strategic Flood Risk Assessment (SFRA). These both comply with the Planning Policy Guidance for the National Planning Policy Framework dated July 2021. Compliance is deemed to satisfy the Environment Agency in controlling the risk of flooding of and from the proposed development.
- 5.4 The site is not in an area identified as a Critical Drainage Area in the Cornwall Council SFRA. The minimum drainage standards ask all new developments to play their part in reducing current rainfall runoff rates. The surface water hierarchy should be followed by using infiltration as far as possible.
- 5.5 The surface water drainage hierarchy should be followed by using infiltration as far as is practicable. Alternatively, where infiltration is not possible, all off-site surface water discharges from developments should mimic greenfield performance up to a maximum 1 in 10 year discharge rate. On site all surface water should be safely managed up to the 1 in 100 plus climate change conditions. This will require additional water storage areas to be created thereby contributing to a reduction in flooding downstream.
- 5.6 The surface water drainage design will consider future climate change as outlined within Technical Guidance for the National Planning Policy Framework. The Lead Local Flood Authority (LLFA – Cornwall Council) request the climate allowance be 50%. Therefore, a 50% climate change allowance will be applied to design calculations.
- 5.7 In accordance with Ciria report C753 The SuDs Manual para 24.7.2, to allow for future urban expansion within the development, it is recommended an increase in paved surface area of 10% be applied to calculations. This 10% will be added to design calculations.

- 5.8 It is prudent to consider the impact of blockage or similar on the development. The potential impact of events in excess of the drainage design standard, or blockage occurring have therefore been assessed.
- 5.9 The school that previously stood on the site had an existing connection to a surface water sewer. The sewer exits the site on the northern boundary to a chamber within Telegraph Road. It then heads east underneath the road for approximately 40m and at this point it crosses the road and discharges out onto Porth Mellon Beach and then into the sea.
- 5.10 The new proposals have a similar impermeable area to the school. Therefore, the scheme proposes to continue using the existing surface water drainage regime. Attenuation is not required for a direct discharge to sea; however, the surface water system design has incorporated features to aid in controlling the flow. A 150mm and 100mm pipe will enter the existing systems helping to restrict the upstream flow. Oversized pipes and chambers above these will help to attenuate and control flow also. Please see Proposed Drainage Layout in Appendix D for details.
- 5.11 Permeable paving shall be used in the two parking courts on site. This will address the water quality issue from these areas by filtering, degrading, and absorbing pollutants prior to entering the surface water network.
- 5.12 The detailed design of the drainage systems will need to be submitted to the LLFA for approval prior to construction. It should include at that stage the following information.
- A description of the foul and surface water drainage systems operation
  - Details of the final drainage schemes including calculations and layout
  - A Construction Environmental Management Plan
  - A Construction Quality Control Procedure
  - A plan indicating the provisions for exceedance pathways, overland flow routes and proposed detention features
  - A timetable of construction including a plan indicating the phasing of development including the implementation of the drainage systems
  - Confirmation of who will maintain the drainage systems and a plan for the future maintenance and management, including responsibilities for the drainage systems and overland flow routes

## 6.0 FOUL DRAINAGE ASSESSMENT

- 6.1 The public sewers maintained by South West Water in the vicinity of the property are shown in Appendix C.
- 6.2 Recent changes to the application and charging process introduced by Ofwat mean that SWW no longer review sewer capacity and are obliged to fund any improvements required to the network from the infrastructure charge imposed on any development within there are of operation.
- 6.3 The school that previously stood on the site had an existing foul connection. This provides a suitable point of connection for the site to the existing SWW combined sewer.

## 7.0 CONCLUSIONS AND RECOMMENDATIONS

- 7.1 The flood risk has been assessed following the principals of National Planning Policy Framework and the level 1 Strategic Flood Risk Assessment for Cornwall. It is concluded that the proposed development of the site does not significantly increase the risk of flooding offsite and the property is not considered to be at significant risk of flooding.
- 7.2 It is further concluded that the design of a surface water drainage system using the principles of SUDS and compliant with the requirements of the Cornwall Strategic Flood Risk Assessment is achievable within the confines of the site.
- 7.3 The foul water discharge from the property can be served by a connection to the existing SWW combined sewer north of the site.



Signed.....  
MARCUS FYLAN-SMITH BEng  
FOR AND ON BEHALF OF  
MBA CONSULTING

Dated: March 2024

CARN THOMAS, HUGH TOWN,  
ISLES OF SCILLY, CORNWALL  
21185

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## APPENDIX A

## Cornwall Council

# Outside Critical Drainage Areas - Drainage Standards Guidance for Cornwall

Revised January 2010

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*This sheet is intended as guidance for drainage not in areas identified as Critical Drainage Areas.*

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### Greenfield Development Sites - greater than 1 hectare

- Following the Building Regulations Drainage hierarchy, surface water should:-
  - i. Drain to a soakaway or infiltration system designed in accordance with the SUDS Manual - CIRIA C697, using a minimum of a 30-year return period storm.

Where an FRA demonstrates that infiltration is not possible:-

- ii. A sustainable drainage system shall be provided ensuring flow attenuation, no adverse impact on water quality and where possible habitat creation.
- The total discharge from the site should aim to mimic greenfield rates. These shall be no more than the theoretical greenfield run-off rates from each of the corresponding 1, 10, 30 and 100 year storms. When these values are less than 5 litres/second, a rate of 5 litres/second can be used. Attenuation may not be necessary if the discharge is directly to coastal waters. In these cases the impact on the receiving environment in terms of habitat, erosion and water quality should be assessed.
  - The design must take into account the appropriate allowance for increased rainfall from climate change. This should be based on the lifetime of the development, the guidance in Annex B of PPS25 and the PPS25 Practice Guide.
  - Underground attenuation and piped sections should be designed for a minimum of the 30-year storm. However total discharge rates from the site must still be controlled for the 100-year storm. Attenuation of events exceeding the piped system may be achieved by temporary flooding of open spaces or car parks. If surface flooding of open areas is not appropriate, the formal drainage system should be designed for the 100 year storm.
  - Where infiltration is not used, long-term storage must be provided to store the additional volume of run-off caused by any increase in impermeable area. This is in addition to the attenuation storage required to address flow rates, see Appendix F of the Drainage Guidance for Cornwall Council. Alternatively rainwater harvesting can be used to offset this volume.
  - The long-term storage should discharge at a rate not exceeding 2 litres/second/hectare, as per *Preliminary rainfall run-off management for developments DEFRA /Environment Agency guidance W5-074 Revision D*.
  - Safe and appropriate flow routes from blockage and exceedance of the drainage system must be evaluated. This must demonstrate no property flooding or increase in flood risk, either offsite or to third parties.

## Previously Developed Sites - greater than 1 hectare

- Development should aim for the standards of a greenfield site outlined above. Where this is not possible the FRA should demonstrate how a sustainable drainage system is being provided which meets the policy aims of PPS25 to reduce flood risk on and off site. The FRA should demonstrate how the development will reduce run-off rates as much as is reasonably practicable.

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## Small Development Sites, less than 1 hectare.

*Note that the Environment Agency are not consulted on sites of less than 1 hectare that are not in Critical Drainage Areas unless there are other constraints such as Main Rivers or the site lies within Flood Zone 2 or 3. Therefore the guidance for sites less than 1 hectare are based on best practice to address flood risk.*

- Following the Building Regulations Drainage hierarchy, surface water should aim to:-
  - i. Drain to a soakaway or infiltration system designed in accordance with the SUDS Manual - CIRIA C697, using a minimum of a 30-year return period storm.

Where infiltration is not possible:-

- ii. A sustainable drainage system should be provided ensuring flow attenuation, no adverse impact on water quality and where possible habitat creation.
- The total discharge from the site should be no more than the theoretical greenfield run-off rates from each of the corresponding 1, 10, 30 and 100 year storms. When these values are less than 5 litres/second, a rate of 5 litres/second can be used. Attenuation may not be necessary if the discharge is directly to coastal waters. In these cases the impact on the receiving environment in terms of habitat, erosion and water quality should be assessed.

*(Products exist that allow individual properties to restrict run-off to of 1.5 litres/second, using private underground storage tanks. A discharge of this rate is typically achieved on the commercially available systems using a proprietary device on the outlet with an orifice of around 30mm. This is combined with a sediment trap and a filter to prevent blockage. Storage is provided on the property in an underground tank or crate system, operating with a maximum depth of water of approximately 500mm. The size of the tank is based on the impermeable area draining to the system. Due to the small orifice size these systems would remain in private ownership as they are unlikely to be adopted.)*

- The design should take into account the appropriate allowance for increased rainfall from climate change. This should be based on the lifetime of the development, the guidance in Annex B of PPS25 and the PPS25 Practice Guide.
- Underground attenuation and piped sections should be designed for a minimum of the 30-year storm. However total discharge rates from the site should still be controlled from the 100-year storm at the greenfield run-off rate from the 100 year storm. Attenuation of events exceeding the piped system may be achieved by temporary flooding of open spaces or car parks. If surface flooding of open areas is not appropriate, the formal drainage system should be designed to accommodate the 100 year storm.
- Safe and appropriate flow routes from blockage and exceedance of the drainage system should be evaluated. This should demonstrate no property flooding or increase in flood risk, either offsite or to third parties.



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21185

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## APPENDIX B

# Flood map for planning

Your reference  
**21185**

Location (easting/northing)  
**90708/10611**

Created  
**10 Jul 2023 15:39**

**Your selected location is in flood zone 1, an area with a low probability of flooding.**

You will need to do a flood risk assessment if your site is **any of the following:**

- bigger than 1 hectare (ha)
- In an area with critical drainage problems as notified by the Environment Agency
- identified as being at increased flood risk in future by the local authority's strategic flood risk assessment
- at risk from other sources of flooding (such as surface water or reservoirs) and its development would increase the vulnerability of its use (such as constructing an office on an undeveloped site or converting a shop to a dwelling)

## Notes

The flood map for planning shows river and sea flooding data only. It doesn't include other sources of flooding. It is for use in development planning and flood risk assessments.

This information relates to the selected location and is not specific to any property within it. The map is updated regularly and is correct at the time of printing.

Flood risk data is covered by the Open Government Licence **which** sets out the terms and conditions for using government data. <https://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/>

Use of the address and mapping data is subject to Ordnance Survey public viewing terms under Crown copyright and database rights 2022 OS 100024198. <https://flood-map-for-planning.service.gov.uk/os-terms>

## Flood map for planning







Your reference  
**21185**

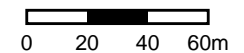
Location (easting/northing)  
**90708/10611**

Scale  
**1:2500**

Created  
**10 Jul 2023 15:39**



-  Selected area
-  Flood zone 3
-  Flood zone 2
-  Flood zone 1
-  Flood defence
-  Main river
-  Water storage area



### Key

#### Surface water

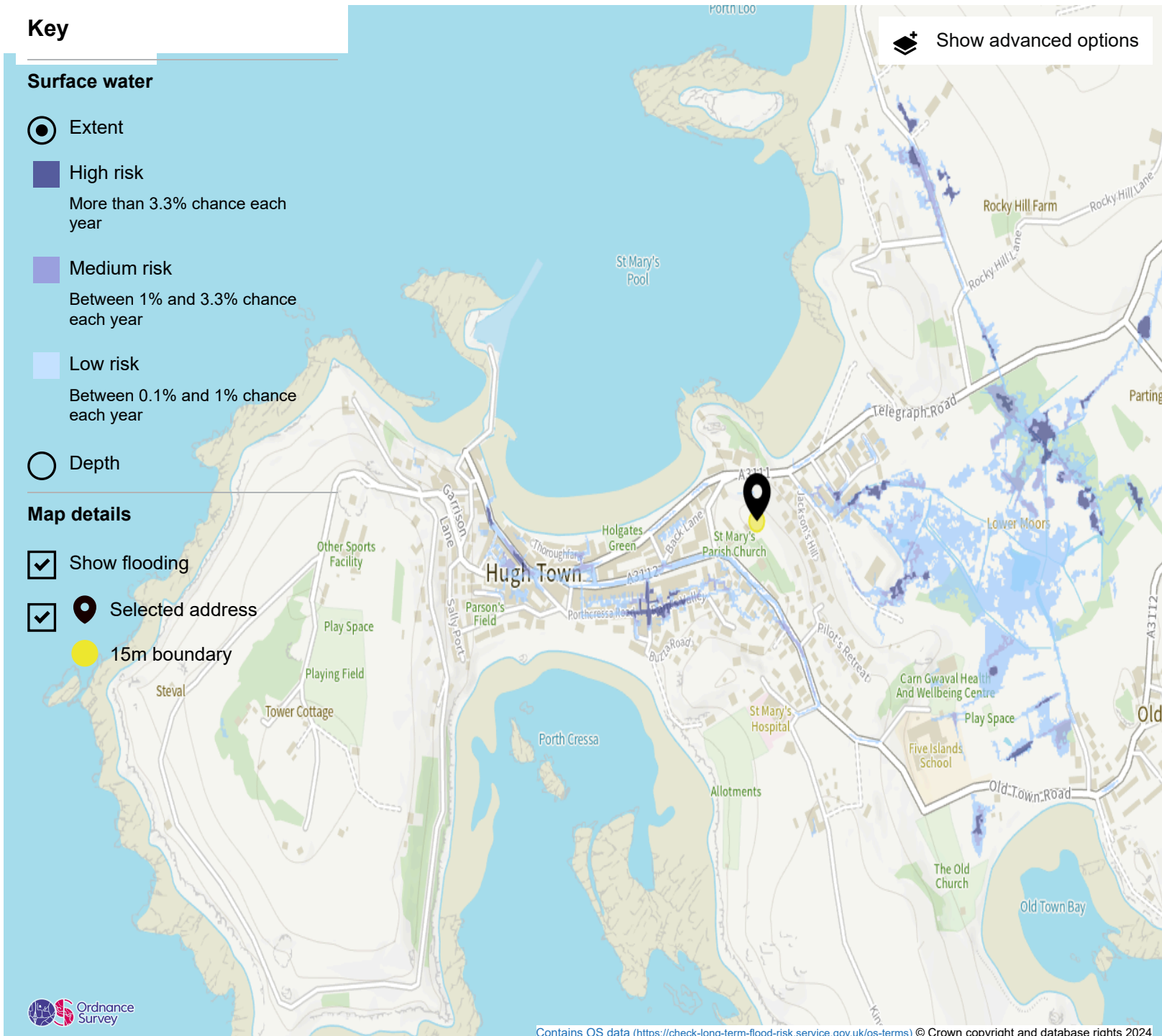
- Extent
  - High risk  
More than 3.3% chance each year
  - Medium risk  
Between 1% and 3.3% chance each year
  - Low risk  
Between 0.1% and 1% chance each year

#### Depth

#### Map details

- Show flooding
- Selected address
- 15m boundary

Show advanced options



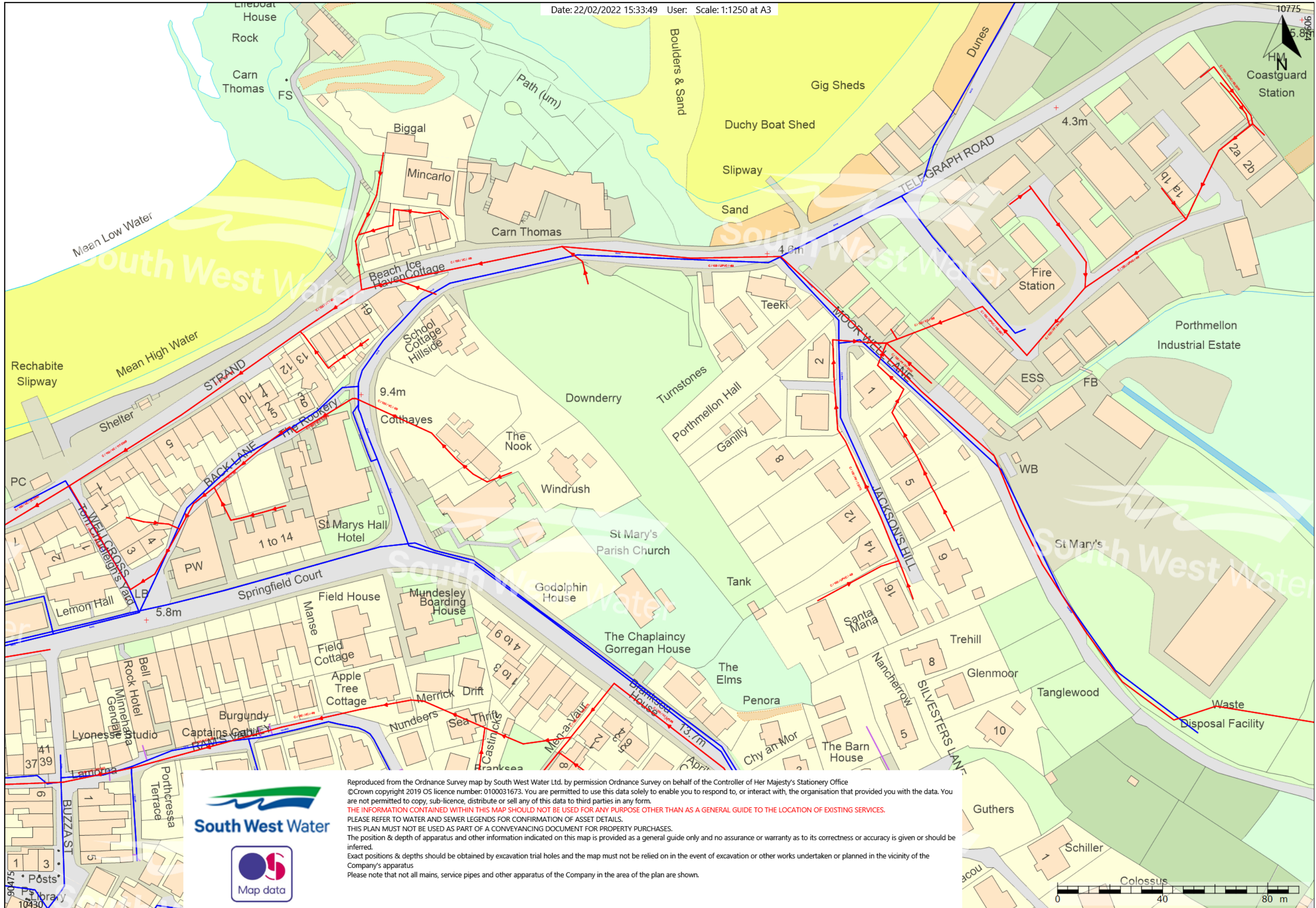
Contains OS data (<https://check-long-term-flood-risk.service.gov.uk/os-terms>) © Crown copyright and database rights 2024

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21185

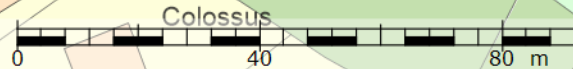
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## APPENDIX C



Reproduced from the Ordnance Survey map by South West Water Ltd. by permission Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office  
 © Crown copyright 2019 OS licence number: 0100031673. You are permitted to use this data solely to enable you to respond to, or interact with, the organisation that provided you with the data. You are not permitted to copy, sub-licence, distribute or sell any of this data to third parties in any form.  
**THE INFORMATION CONTAINED WITHIN THIS MAP SHOULD NOT BE USED FOR ANY PURPOSE OTHER THAN AS A GENERAL GUIDE TO THE LOCATION OF EXISTING SERVICES.**  
 PLEASE REFER TO WATER AND SEWER LEGENDS FOR CONFIRMATION OF ASSET DETAILS.  
 THIS PLAN MUST NOT BE USED AS PART OF A CONVEYANCING DOCUMENT FOR PROPERTY PURCHASES.  
 The position & depth of apparatus and other information indicated on this map is provided as a general guide only and no assurance or warranty as to its correctness or accuracy is given or should be inferred.  
 Exact positions & depths should be obtained by excavation trial holes and the map must not be relied on in the event of excavation or other works undertaken or planned in the vicinity of the Company's apparatus  
 Please note that not all mains, service pipes and other apparatus of the Company in the area of the plan are shown.



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## APPENDIX D

# PLANNING



- NOTES**
- THIS DRAWING IS NOT TO BE USED FOR CONSTRUCTION UNLESS MARKED ABOVE "FOR CONSTRUCTION"
  - THE COPYRIGHT ON THIS DRAWING IS RETAINED BY MICHAEL BEARDSALL ASSOCIATES LTD
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS
  - THE CONTRACTOR IS RESPONSIBLE FOR ALL DIMENSIONS AND THE CORRECT SETTING OUT ON SITE. ONLY FIGURED DIMENSIONS ARE TO BE USED  
DO NOT SCALE : IF IN DOUBT ASK
  - DIMENSIONS SHOULD NOT BE TAKEN ELECTRONICALLY
  - ALL MATERIALS AND WORKMANSHIP TO COMPLY WITH THE CURRENT BRITISH STANDARDS AND CODES OF PRACTICE

- PRIVATE DRAINAGE**
- BUILDING DRAINAGE TO BUILDING REGULATIONS PART H.
  - ALL BUILDING DRAINAGE NOT IN ROAD TO BE DN100 PLASTIC UNLESS OTHERWISE NOTED.
  - ALL BUILDING DRAINAGE IN ROAD TO BE DN150 STRUCTURED WALL PLASTIC UNLESS OTHERWISE NOTED.
  - ALL BUILDING FOUL DRAINAGE AT GRADIENTS NOT FLATTER THAN 1:40 UNLESS OTHERWISE NOTED.
  - ALL BUILDING SURFACE WATER DRAINAGE AT GRADIENTS NOT FLATTER THAN 1:100.
  - UNDER GARDENS WITH 0.6m COVER OR MORE CLASS P FULL DEPTH GRANULAR SUPPORT, SINGLE SIZE MATERIAL ONLY (CLAUSE 663).
  - UNDER GARDENS WITH LESS THAN 0.6m COVER CLASS Q GRANULAR SURROUND WITH PROTECTION (CLAUSE 665).
  - UNDER SOLID GROUND FLOORS 0.3m OR MORE FROM UNDERSIDE OF SLAB CLASS W GRANULAR SURROUND, SINGLE SIZE MATERIAL ONLY (CLAUSE 673)
  - UNDER SOLID GROUND FLOORS 0.3m OR LESS FROM UNDERSIDE OF SLAB CLASS Y CONCRETE SURROUND FOR SHALLOW PIPES UNDER BUILDINGS (CLAUSE 676)
  - PIPE RUNS NEAR FOUNDATIONS CLASS Z CONCRETE SURROUND (CLAUSE 678)
  - UNDER ROADS AND CONSTRUCTED UNDER STEPS CLASS O FULL DEPTH GRANULAR SUPPORT, SINGLE SIZE MATERIAL ONLY (CLAUSE 661).
  - FOR PREFORMED POLYPROPYLENE MANHOLES AND BRANCHES, MAIN CHANNEL TO BE USED FOR MAIN FLOW. ALL SPARE INLETS (SUPPERS) TO BE PROPERLY CAPPED OFF.
  - WHERE REQUIRED BENDS ON BUILDING DRAINAGE RUNS MUST BE LOCATED IMMEDIATELY OUTSIDE CHAMBERS AND ACCESS POINTS.

**SURFACE WATER DRAINAGE NOTES**

- RAIN WATER PIPE POSITIONS TBC BY ARCHITECT
- NEW PROPOSED CONNECTION TO EXISTING SURFACE WATER NETWORK AT S1.003
- DN100 PIPE S2.1 HAS BEEN USED TO RESTRICT FLOW INTO THE EXISTING SURFACE WATER NETWORK
- DN150 PIPE S1.5 HAS BEEN USED TO RESTRICT FLOW INTO THE EXISTING SURFACE WATER NETWORK
- OVERSIZED PIPES AND CHAMBERS HAVE BEEN USED TO HELP ATTENUATE AND CONTROL FLOW GOING INTO THE EXISTING SURFACE WATER NETWORK

**PRIVATE DRAINAGE KEY**

- PPIC: SURFACE WATER DRAIN, R12/346
- NEPPIC: POLYPROPYLENE INSPECTION CHAMBER (PPIC) 4600 DETAIL ON MBA DWG. 21185-210, R12/401 & 471
- TYPE A/B/C: NON-ENTRY POLYPROPYLENE INSPECTION CHAMBER (NEPPIC) 4600 DETAIL ON MBA DWG. 21185-210, R12/402 & 471
- TYPE A/B/C: REST BEND (RAINWATER PIPE) DETAIL ON MBA DWG. 21185-210, R12/691
- TYPE A/B/C: DN1200 PC MANHOLE SEE DETAIL ON MBA DWG. 21185-211, R12/407
- TYPE A/B/C: DN1500 PC MANHOLE SEE DETAIL ON MBA DWG. 21185-211, R12/407
- ACD: ACO DRAIN
- FD: FRENCH DRAIN
- PERMEABLE: DENOTES PERMEABLE PAVING/DECONTAMINATION SYSTEM
- FFP: DENOTES DIRECTION OF FLOOD FLOW PATH

**EXISTING DRAINAGE KEY**

- 1000/150mm: EXISTING FOUL WATER SEWER
- 1000/150mm: EXISTING SURFACE WATER SEWER

**PROPOSED DRAINAGE LAYOUT**  
SCALE 1:200

P1	27.03.24	ISSUED FOR PLANNING	MFS	MP
		REVISION SUMMARY	BY	CHK
JOB TITLE: PROPOSED DEVELOPMENT CARN THOMAS ST. MARY'S ISLES OF SCILLY				
CLIENT: LIVEST				
DETAIL: PROPOSED DRAINAGE LAYOUT				
DRN. BY: M.FYLAN-SMITH				
DATE: MAR 2024		SCALE: 1:200 @ A1		
JOB NO: 21185	DRAWING NO: 200	REV: P1		
Boscawen House · Chapel Hill · Truro · Cornwall TR1 3BN Tel. 01872 260962 Fax. 01872 260963				



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Fax 01872 260963  
[www.mbatruro.co.uk](http://www.mbatruro.co.uk)

