# Flood Risk Assessment

Prepared for: 1 Bass Terrace, Treverbyn Road, St Austell, PL25 4FA.

Prepared by: Dean / Thomas

Planning application: PA21/05818

21 June 2021

# OVERVIEW

This report has been prepared to assess the Flood Risk for the development of a new driveway access from Treverbyn Road to 1 Bass Terrace, St Austell.

The driveway access would enable use of an electric car charging point.

The report shows that the property is located in Flood Zone 1. However as the application site is within a Critical Drainage Area a Flood Risk Assessment is required.

Therefore, this report will also outline how the new driveway access will be drained without increasing runoff downstream.

In compiling this report the following sources have been consulted:

1. Strategic Flood Risk Assessments 2017 - Cornwall Council
2. The Cornwall Local Flood Risk Management Strategy 2020-2026 - Cornwall Council
3. Cornwall Local Plan Policy 26 - Cornwall Council
4. Environment Agency
5. Gov.uk
6. Guidance on Permeable Surfacing of front gardens - Communities and Local Government / Environment Agency
7. Sustainable Drainage Principles (SuDS)

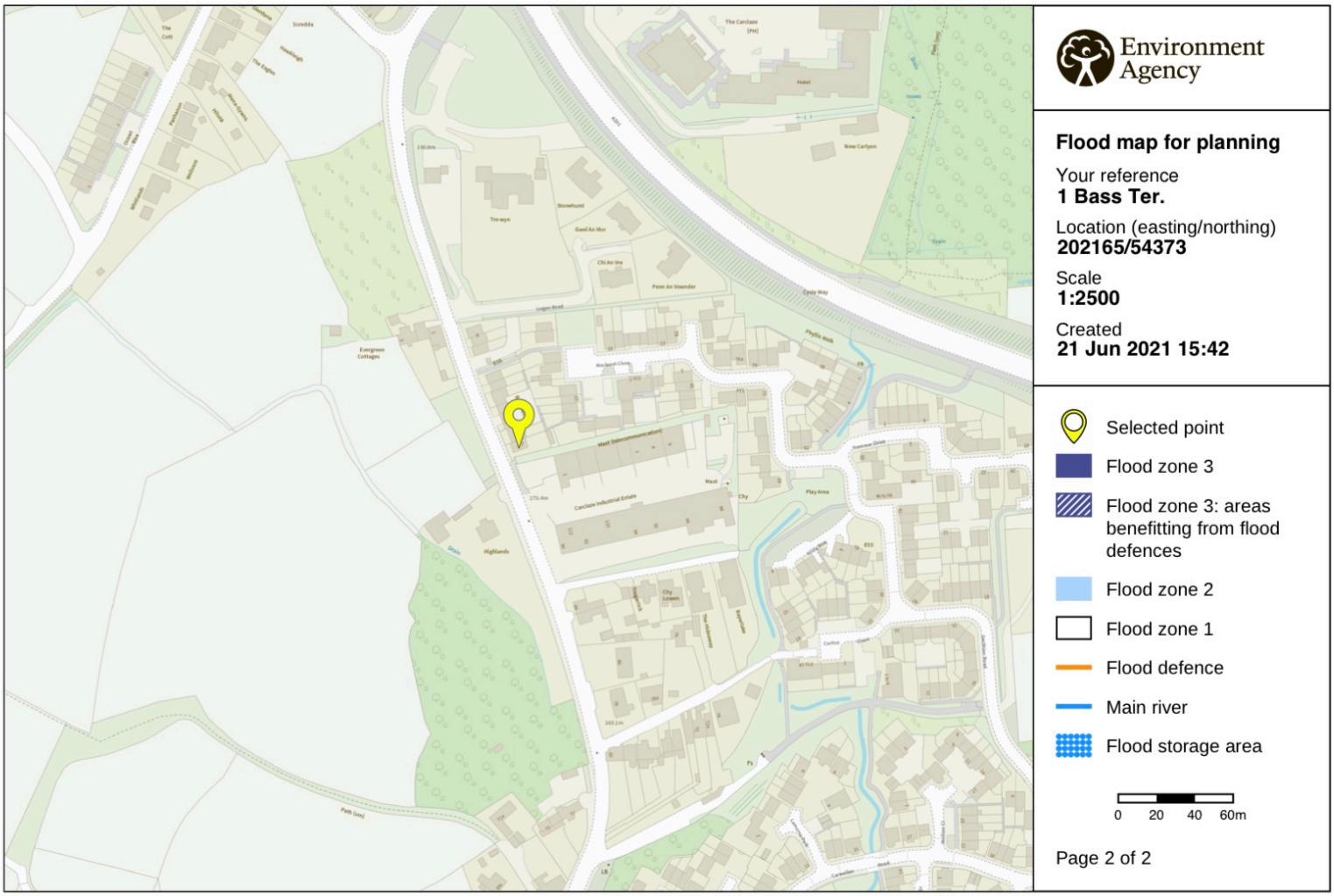
# OVERALL FLOOD RISK - LOW

As advised by the Environment Agency the property is in Flood Zone 1 with a low probability of flooding. The gov.uk Flood Risk Summary identifies the risk of flooding as Very Low.

## River and Sea Flooding - Very Low Risk

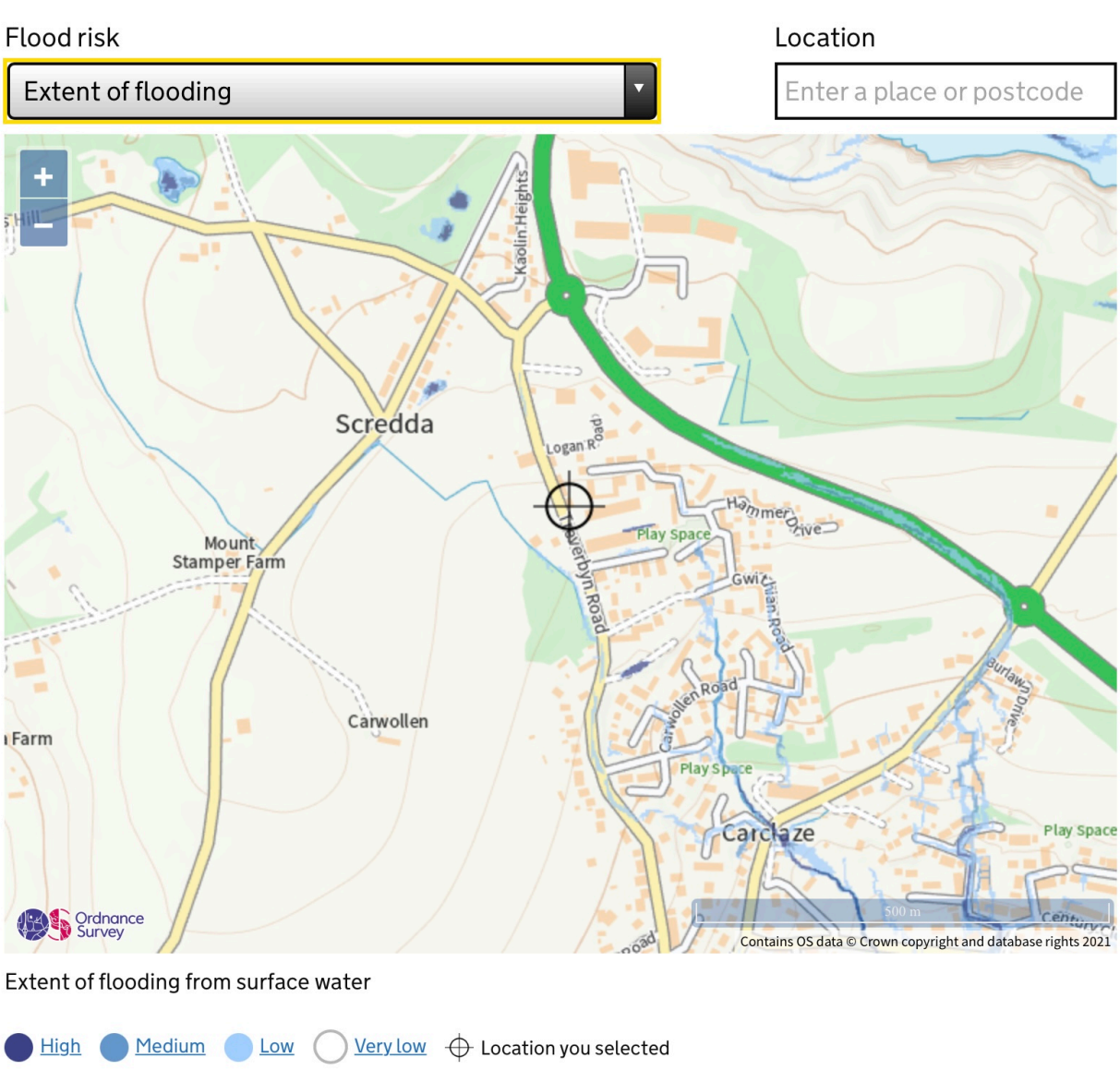
Based on the gov.uk Flood Risk summary, there is a very low risk of flooding from rivers or the sea.

The Environment Agency map below shows the location of the property on Treverbyn Road, which is at 178 meters above sea level. There are no no rivers or streams, or structures that would affect water flow in its vicinity.



## Surface Water Flooding - Very Low Risk

Based on the gov.uk Flood Risk summary, there is a very low risk of the application site being flooded by surface water.




Due to the low level of frequency and/or severity of risk from flooding no changes to existing flood prevention measures at the property would be required as a result of the proposed new driveway access.

## Location Plan showing Site development

The proposed development is for a new driveway giving access to a parking area and an electric car charging point at the side of the property. For information, the parking area is currently a concrete paving slab walkway and stone chipping. It will be adapted to be wheel track parking, using the same concrete paving slabs.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Metres

N

ReQuestaPlan

Plan Produced for: Andrew Thomas

Date Produced: 02 Jun 2021

Plan Reference Number: TQRQM21153115430387

Scale: 1:500 @ A4

## Survey

The application site is gently sloping southwards in line with the natural contour of the land. The highest point of the site is 178m above sea level.

A site survey shows the height above sea level changes of the application site to be -65cm. The site will retain a further soak-away area which drops to -70cm from the highest point.

The site photograph below shows the results of the site survey.

## Surface water management

As the application site is in a Critical Drainage Area specific focus is being given to ensuring effective surface water management.

The existing surface area of the application site is 9.25 sq meters.

The existing surface is made up of lawn, small shrubs and concrete paving slabs. Water runs off the existing concrete paving slabs into the adjacent lawn with excess water running into drains.

To ensure no increase in runoff from the new driveway access, the applicant has consulted the Environment Agency and Communities and Local Government 'Guidance on the permeable surfacing of front gardens'. They have also consulted the Sustainable Drainage Principles, which align with The Cornwall Local Flood Risk Management Strategy (2020-2026) and the Cornwall Local Plan Policy 26, to reduce flood risk in urban areas by integrating natural flood management solutions and replicating natural surface water flows and decrease surface water runoff.

To meet these aims, the applicant will ensure the driveway access surface will be a permeable solution. They will use a porous concrete/asphalt or a wheel track solution whereby the lawn would be maintained between the wheel tracks.

If a wheel track solution was used the total surfaced area would be <5 sq meters, with the remaining area being lawn.

They are also committed to maintaining the new permeable solution to ensure its ongoing durability.

By adopting the permeable solution and allowing rainwater to drain into the ground, there will be no increase to the volume of surface water or the rate of surface water run off than currently exists.

## Summary

- The application site is in Flood Zone 1 with a low risk of flooding from rivers, streams or surface water.
- The application site is in a Critical Drainage Area.
- The applicant has consulted sources from the Environment Agency, Cornwall Council and gov.uk to understand the measures necessary to deliver the proposal without increasing runoff downstream.
- The applicant will use and maintain a permeable solution in line with Sustainable Drainage Principles.

END.