

Flood Risk Assessment

Single Storey Extensions at 68 Town Drive, Quadring PE11 4QN

Last updated 12.03.25



Figure 1 Front Elevation as existing

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1.0 Introduction & Background

The proposal is for single storey extension to 68 Town Drove, Quadring (with existing single storey rear projection, and side & rear conservatories to be removed).

Changing the design of the replacement shed approved H15-0712-24 granted 19th November 2024 to replace a garage of same footprint is also part of the application because we propose to make it shorter (6.25m long instead of 7.25m) and to change the colour of windows, doors and cladding.

The property is occupied by the applicants Mr & Mrs Gannon and Mrs Gannon's parents who live with them. Mrs Gannon's mother is disabled with a condition that requires her to have oxygen and which is worsening to the point where she will soon require a wheelchair. A fully wheelchair accessible ground floor bedroom with ensuite is proposed to be constructed as a side extension with a pitched roof. The whole of the ground floor of the property is to be made wheelchair accessible including level access to the front and side doors.

The proposed flat roofed rear extension is to provide space for all the family to visit – children, grandchildren and great-grandchildren. The existing kitchen is tiny and the current dining area is in the side conservatory (too hot in summer, too cold in winter). The proposed new kitchen-dining-family room will bring the property up to modern standards. The utility room will provide much needed storage and laundry facilities in a more user-friendly space.



Figure 2 : Existing conservatories which are to be removed

2.0 Site and Sources of Flooding

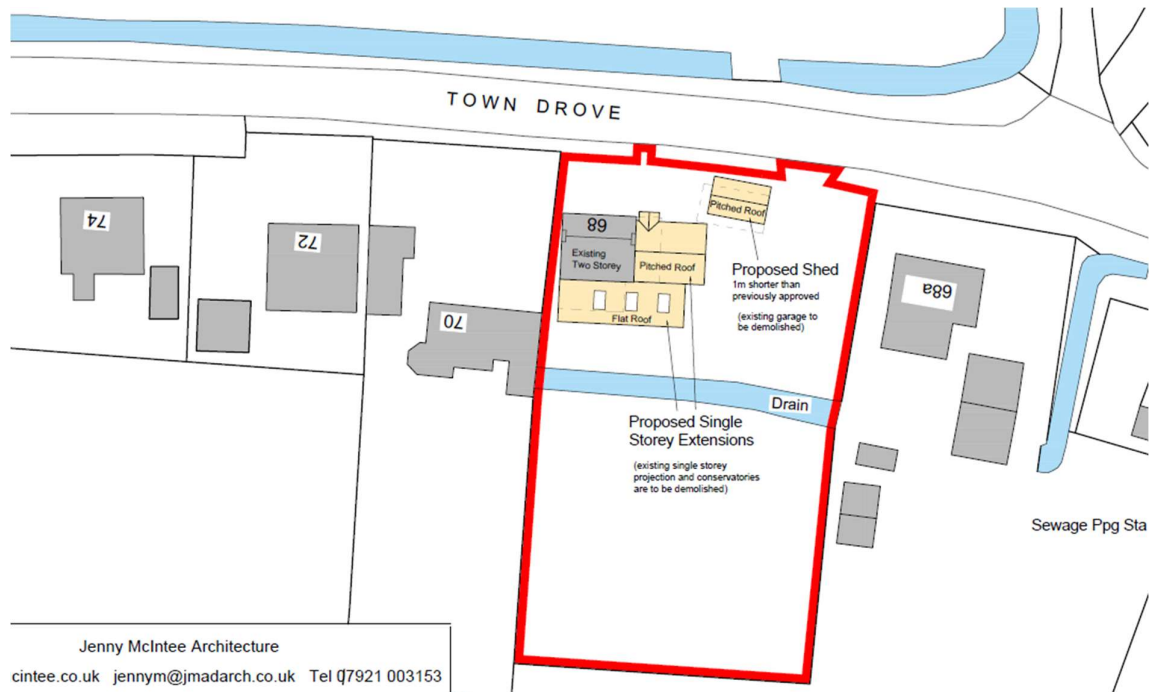


Figure 3: Site Block Plan showing proposed single-storey extensions in context

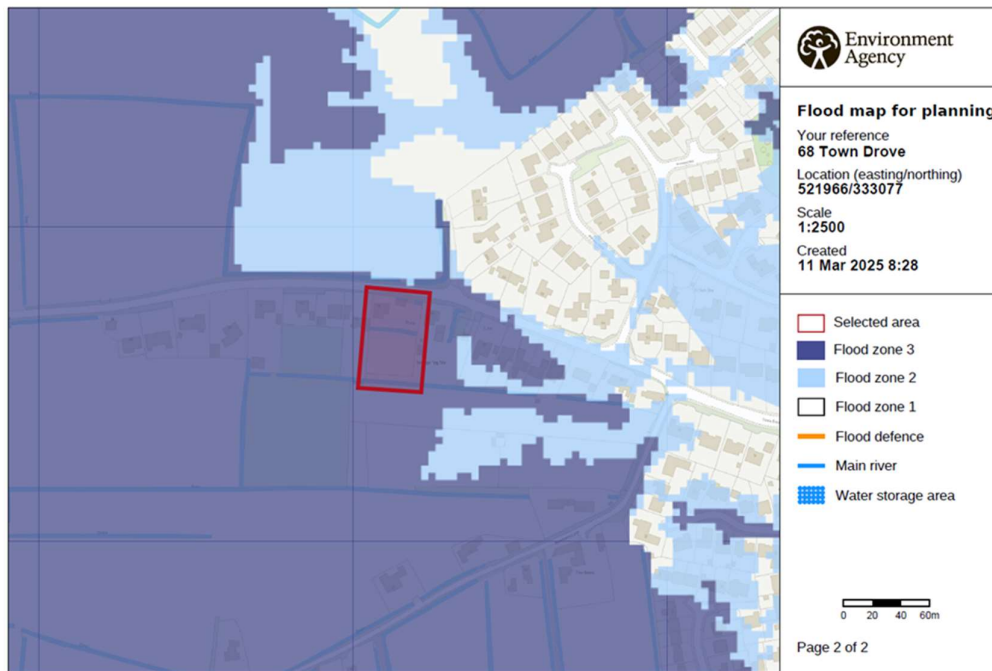


Figure 4: Environment agency flood map for planning (rivers and sea) Flood Zone 3

Flood map for planning

Your reference	Location (easting/northing)	Created
68 Town Drove	521966/333077	11 Mar 2025 8:28

Your selected location is in flood zone 3, an area with a high probability of flooding.

This means:

- you must complete a flood risk assessment for development in this area
- you should follow the Environment Agency's standing advice for carrying out a flood risk assessment (see www.gov.uk/guidance/flood-risk-assessment-standing-advice)

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 2024 OS AC0000807064. <https://flood-map-for-planning.service.gov.uk/os-terms>

Figure 5: Environment Agency Risk of Flooding from Rivers and Sea

2.1 Flooding From Rivers and Sea

The Environment Agency place the site in flood zone 3 with a high probability of flooding from rivers or sea. However, looking at the South East Lincolnshire Strategic Flood Risk Assessment the site is not at risk of tidal flooding, not even taking into account climate change.

See below an extract from the Residual Flood Hazard South Holland District 2115 map (1% fluvial, 0.5% tidal) in appendix of the SFRA

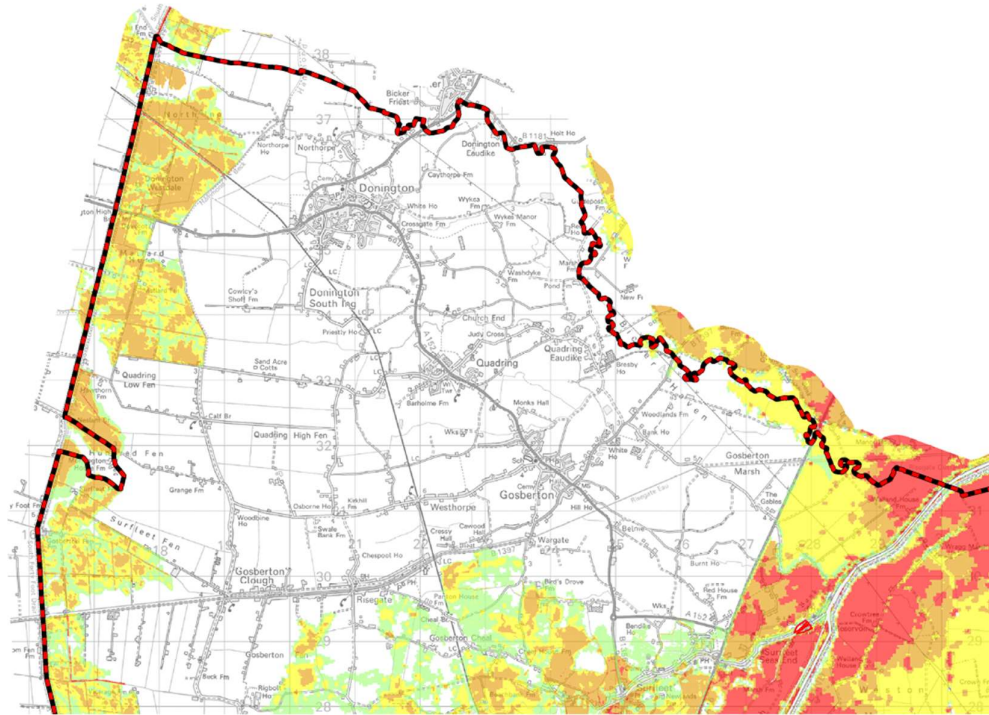


Figure 6: Quadring is clear of flooding in the SFRA maps

2.2 Surface Water Flooding

The site is at low risk of surface water flooding:

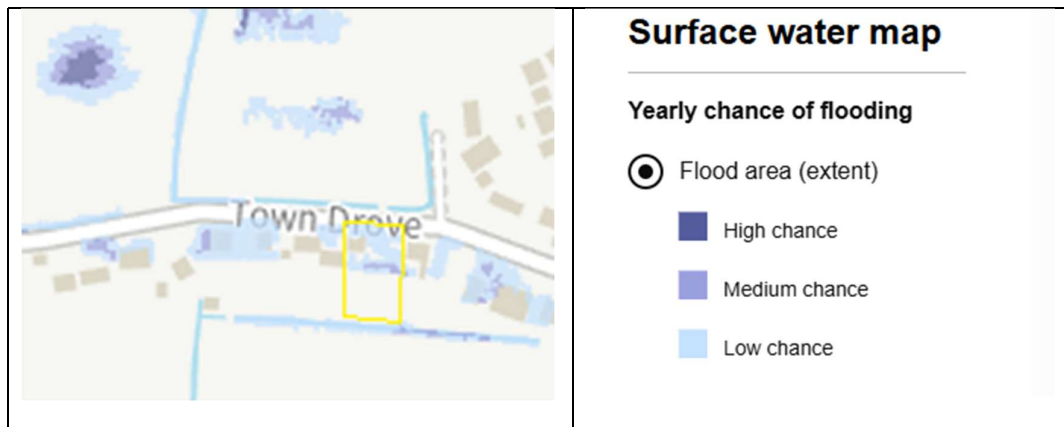


Figure 7: Present day yearly chance of surface water flooding. The site of the extension is low chance of flooding.

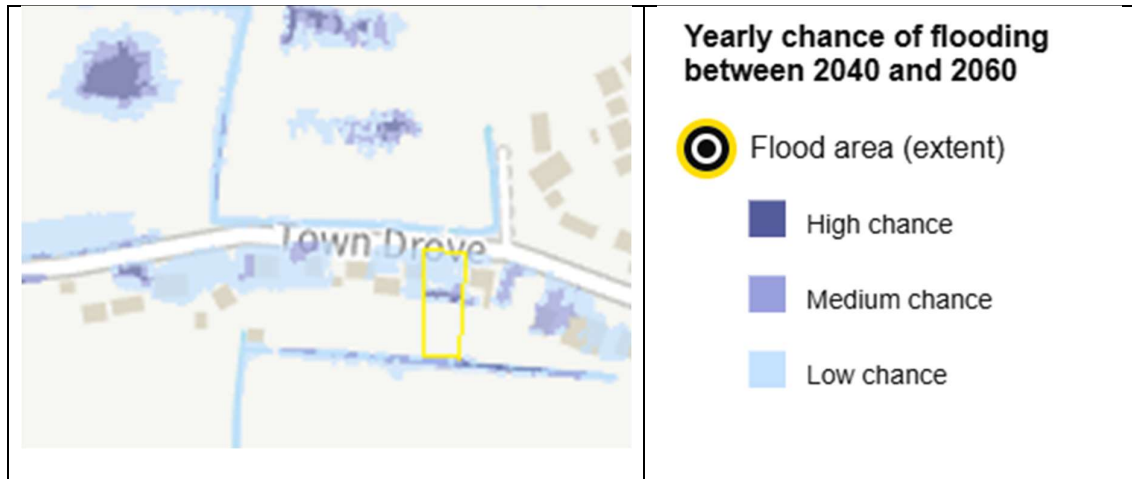


Figure 8: Surface water flood map 2040-2060 shows the extensions and the ground floor of the house at low chance of flooding.

3.0 Flood Resistance and Resilience measures proposed:

The new front entrance door is to be a flood-proof door and other doors are to be fitted with demountable flood barriers which can be installed when there is a flood warning issued.

The extensions to be constructed with solid floors.

PIR insulation with a closed-cell structure is to be installed in extension floors and in the lower part of the cavity walls.

The existing house underfloor air bricks to be changed to smart anti-flood air bricks which will close automatically in the event of a flood.

Electrical wiring in the extension will be at least 0.6 m above the floor level with all wiring coming from above.

Recommended to fit plasterboard horizontally so that only the lower parts would need to be replaced after a flood.

Recommended to have Ceramic tiled flooring instead of carpets.

One-way valves to be fitted to the FW drains to prevent water coming up into the home via sewers.

Consider mounting kitchen appliances above floor level

Consider lower kitchen cupboards with slide out baskets to enable them to be quickly removed and placed on the worktop

4.0 Conclusion

There is a low risk of flooding now and in the future.

Flood resistance and resilience has been considered in the extension design.

The proposed extension floor level will not be any lower than the existing dwelling floor level. It needs to be at the same level as existing for wheelchair access, therefore it is not possible to raise the floor. It is necessary to have a ground floor bedroom for elderly and disabled family member with a worsening health condition.

The property will be registered for flood warnings. The check for flooding service <https://www.gov.uk/check-flooding> lets people know the risk of flooding from rivers, sea and ground water. Through this service the occupants of the house sign up for free warnings where they will be alerted by phone, text or email when flooding is expected. Arrangements can be made to install demountable flood barriers and be ready to evacuate if it becomes necessary to do so.

The family are to put together a personal flood plan using guidelines on <https://www.gov.uk/government/publications/personal-flood-plan>

The extension roof area is 117 sq m, the demolished roof area is 39 sq m. The old garage footprint area is 30 sq m and the replacement shed is only 26 sq m. The nett increase in roof area is $117 + 26 - 39 - 30 = 74$ sq m. The extensions and shed roof water is to be dealt with on site via new surface water soakaways. Water butts will be installed on the rainwater downpipes to intercept and store water to be used on the garden, minimizing the amount of water that goes into the soakaways. It is not proposed to discharge any roof water into the dyke, therefore all water is dealt with on site and the proposal does not increase the flood risk on site or elsewhere.

Overall, the property will have improved flood resistance and flood resilience, the safety of the occupants has been managed and the proposal does not increase the flood risk on site or elsewhere.