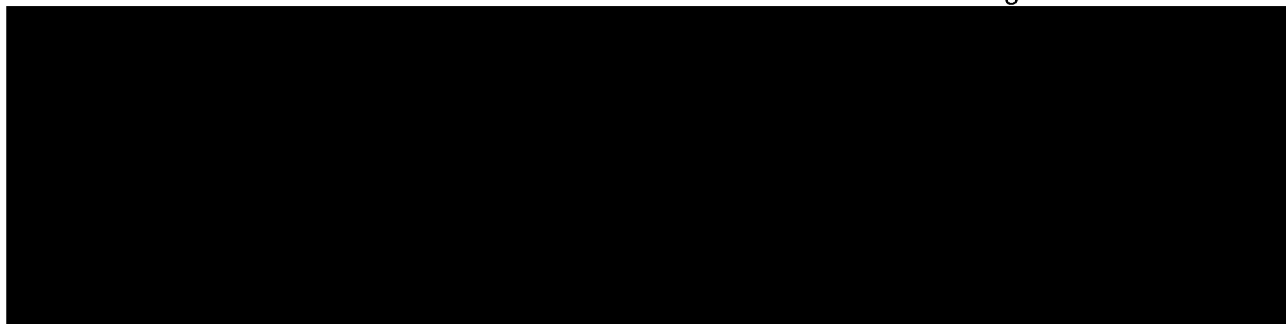




Proposed Residential Development

Land at 31 Meadow Way

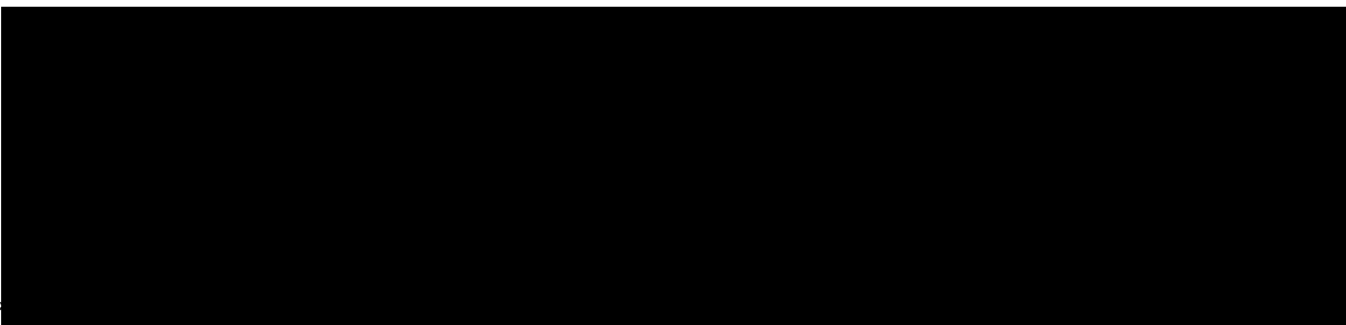
Westergate

West Sussex

Flood Risk Assessment

On behalf of

Mr Warwick and Mrs Rhodes



31 MEADOW WAY, WESTERGATE, WEST SUSSEX

PROPOSED RESIDENTIAL DEVELOPMENT

Flood Risk Assessment

1. Background

- 1.1 This report has been produced on behalf of Mr Warwick and Mrs Rhodes in support of a planning application for residential development on land at 31 Meadow Way, Westergate.
- 1.2 The report concerns flood risk and has been prepared generally in accordance with the recommendations of Planning Policy Statement 25 – Development and Flood Risk (PPS 25).
- 1.3 The drawings supporting this report are as follows:
Dwg. No. 1386/1.1 Plan for FRA

2 Proposed Development

- 2.1 The proposed development comprises the construction of a new dwelling within the grounds of No. 31 Meadow Way.
- 2.2 The new dwelling is likely to comprise a 3-bedroom chalet style bungalow.

3. The Site

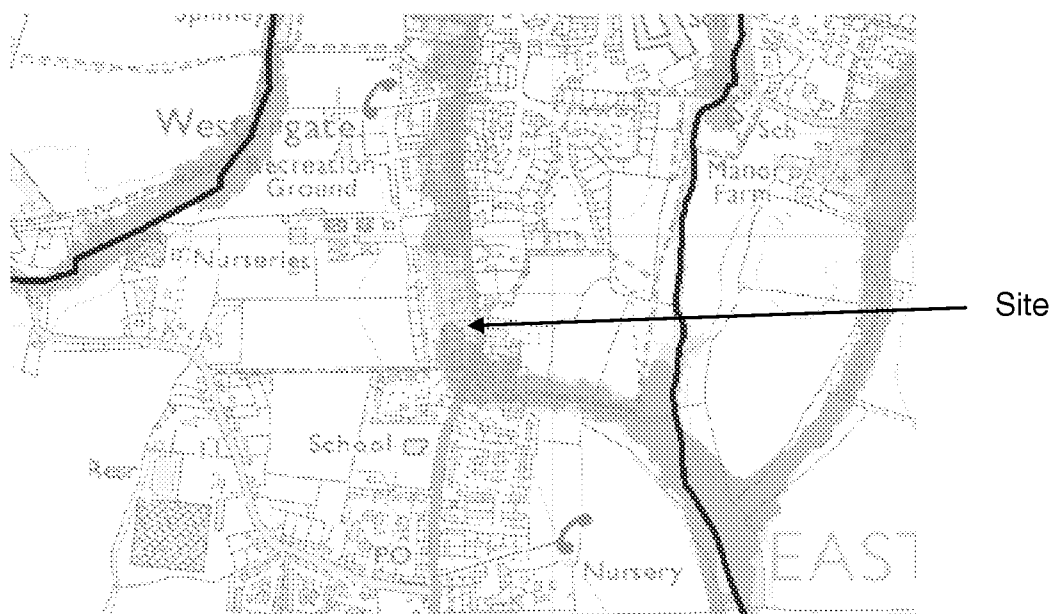
- 3.1 The site is located on land currently occupied by No. 31 Meadow Way. The area of the new plot to be formed is around 0.04 ha. It is approximately 25m deep with a road frontage of 12m. The OS Grid Reference is SU 9385 0484.
- 3.2 The site is bounded on all sides by other residential development.

4. Topography

- 4.1 The general area slopes from north to south at an average gradient of around 1 in 200. There is a local low area and spring just south of the property and a nearby watercourse channels surface water east from here to the Lidsey Rife.
- 4.2 The site itself also falls from north to south with levels to Ordnance Datum shown on the accompanying drawing. The ground level at the proposed new dwelling is in the region of 7.25 metres Above Ordnance Datum (m AOD). The existing dwelling has a floor level of around 7.39m AOD.

5. Flooding History

- 5.1 The site is shown to lie within fluvial Flood Zone 2 on the Environment Agency's flood map, a copy of which is reproduced below. This is an indication that the site may be vulnerable to flooding from a rainfall event with a return period of between 1 in 100 and 1 in 1000 years.



- 5.2 There are no records of flooding on the site itself but there have been various incidents of minor road and garden flooding in this area, which has a high water table in places and some difficult land drainage issues.
- 5.3 It is proposed to construct the new dwelling with a floor level around 150mm higher than that of the existing dwelling, No. 31. A floor level of 7.550m AOD for the new dwelling will place it around 300mm above the existing ground level.

6. Surface Water Drainage

- 6.1 The existing surface water drainage of No. 31 has not been examined but is likely to comprise soakaways. However, there is a public surface water sewer in Westergate Street and a private surface water sewer in the southern verge of Meadow Way, to which a connection may have been made.
- 6.2 It is proposed to use soakaways for the new dwelling and percolation testing to BRE 365 will be required to confirm the size of soakaways that are required. Suitable locations for the soakaways are indicated on the accompanying plan. The soakaways are likely to comprise shallow geocellular structures with relatively large surface areas.

7. Foul Water Drainage

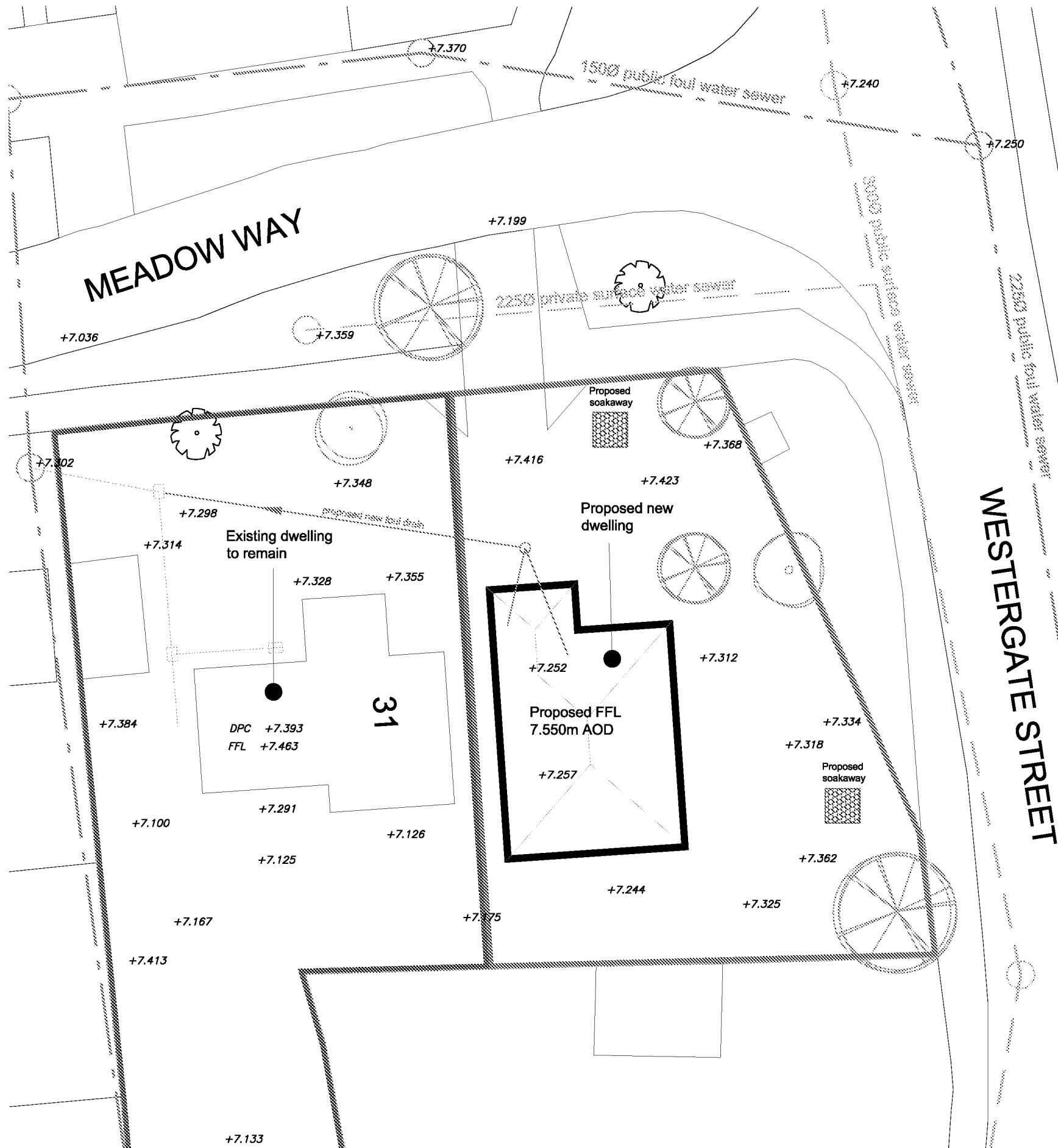
- 7.1 Again, the existing foul water drainage of No. 31 has not been examined but is thought to comprise a connection to the adjacent public foul water sewer as indicated.
- 7.2 This existing connection is likely to be used for the new dwelling, subject to a satisfactory CCTV survey to confirm its suitability.

8. Conclusions and Recommendations

- 8.1 The site lies within Flood Zone 2 and there is a history of flooding problems in the area. A flood risk assessment has therefore been carried out in accordance with PPS 25.
- 8.2 It is recommended that the floor level of the proposed new dwelling is set no lower than 7.55m AOD, which will place it 150mm above that of No. 31 Meadow Way and 300mm above the existing ground level at the site.
- 8.3 The new surface water drainage will need to be carefully designed using SUDS techniques, following percolation tests to BRE 365 and having due regard to a high water table in this general area.
- 8.4 Foul water drainage is likely to be taken to the public foul water sewer immediately to the west of No. 31 via this property's existing connection, subject to a satisfactory CCTV inspection.
- 8.5 It is recommended that any new works are designed in accordance with good practice in flood risk areas, employing flood resilient materials and building techniques with raised

electrics. Flood proofing should be carried out in accordance with Approved Document C and the publication '*Improving the Flood Performance of New Dwellings*' issued by the Department for Communities and Local Government, May 2007.

1386-R1/RTFC



Location Plan - scale 1:1250

Plan
scale 1:200

-	Original	RTFC	10.1.11
Rev.	Description	Drn.	Date

Project
31 Meadow Way Westergate

Client
Mr Warwick & Mrs Rhodes
Drawing Title
Plan for FRA

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Scale	As shown	At original	A3
Drawing Number	1386/1.1	Revision	-