

B.3 DA03 Gravesham Rural

Thameside Stage 1 SWMP : Summary and Actions

Drainage Area 03

Area overview

Area (km²) 76

Drainage assets/systems	Type	Known Issues/problems	Responsibility
Sewer Network	Sewers (combined, foul and surface water)	Known problems of surcharging and overloaded sewers at numerous locations across the drainage area	Southern Water and Thameswater
Shorne and Higham Marshes	Main river and ordinary watercourse	There are no known issues.	Environment Agency/Landowner/KCC
Unnamed Drains - collection of drains	Ordinary watercourse	There are no known issues.	Landowner/KCC

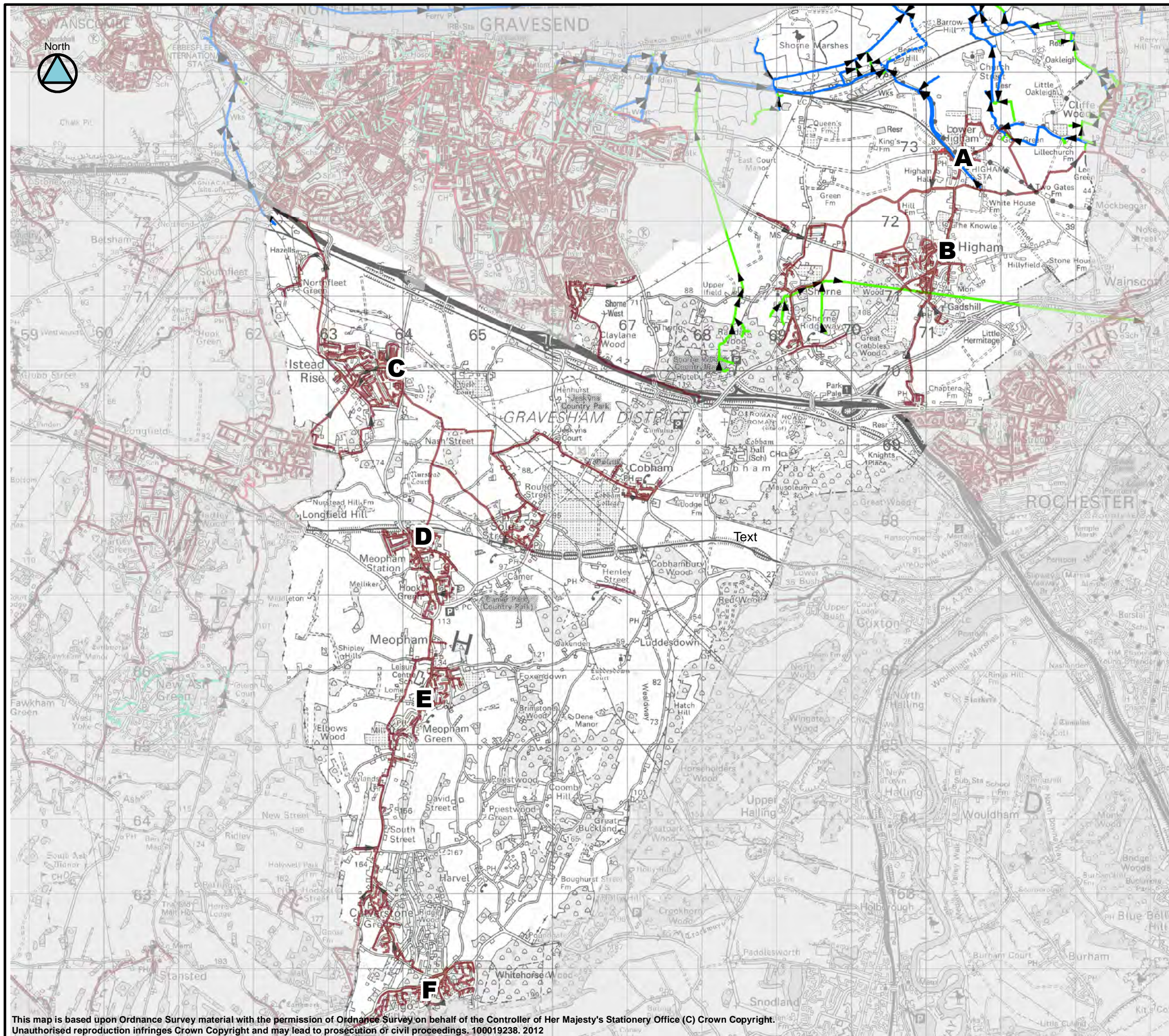
Flood risk

Receptor	Source	Pathway	Historic Evidence
A: Lower Higham	Heavy rainfall resulting in surface water run off and overloaded sewers	Southern Water Sewers Surface water flows along Church Street and Chequers Street	There is historic evidence of run off affecting highways and overloaded sewers. FMfSW 1 in 200 yr (deep)
B: Higham	Heavy rainfall resulting in surface water run off leading to overloaded sewers	Southern Water Sewers Surface water flows along Hermitage Road and School Lane Localised ponding occurs in low spots of Higham.	Incidents of flooding within the curtilage of properties and flooding along the carriageway FMfSW 1 in 200 yr (deep)
C: Istead Rise	Heavy rainfall resulting in flooding from overloaded sewers	Southern Water Sewers Overland surface water flows along Downs Road, Brookes Road, A227, and Bracondale Avenue and Lewis Road	Incidents of flooding caused by overloaded sewers recorded by Southern Water
D: Hook Green & Meopham Station	Heavy rainfall resulting in run off and overloaded drains and gullies	Surface water flows along Wrotham Road	Records from Kent County Council show flooding of the carriageway caused by surface water.
E: Meopham	Heavy rainfall resulting in surface water run off, overloaded sewers and gullies	Southern Water Sewers A227 is a known route for surface water run off. Localised ponding on Cricketers Drive, Pitfield Drive, Whitehill Road and Meopham School	There are records of hydraulic overload from sewers and gullies. There are also records of surface water run off affecting highways.
F: Vigo Village	Heavy rainfall resulting in overloaded gullies and run off. A burst water main has also been described as a source of flooding.	Water main. Gullies and drains A227 is a known route for surface water run off. Localised ponding across Vigo Village along Waterlow Road, Timber Bank and Fern Down.	There are historic records of flooding from various sources.

Summary of Location-specific Actions

Area of benefit	Location of action	Action	Action owner	Priority
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Instead Rise (B) Hook Green (D),	Wrotham Road	Monitor the performance of the newly installed soakaways.	KCC	Long term
Istead Rise (B),	School Lane	Investigate the method of surface water drainage on this road, i.e. check records to assess where the surface water is draining to.	KCC, SW	Short Term



Legend

- Combined Sewer
- Surface Water Sewer
- Foul Sewer
- Main River (EA) - open channel
- Main River (EA) - culverted
- Ordinary Watercourse - open channel
- Ordinary Watercourse - culverted

Receptors

- A** Lower Higham
- B** Higham
- C** Istead Rise
- D** Hook Green & Meopham Station
- E** Meopham
- F** Vigo Village

Client:



Partners:



Consultant:



Thames Water

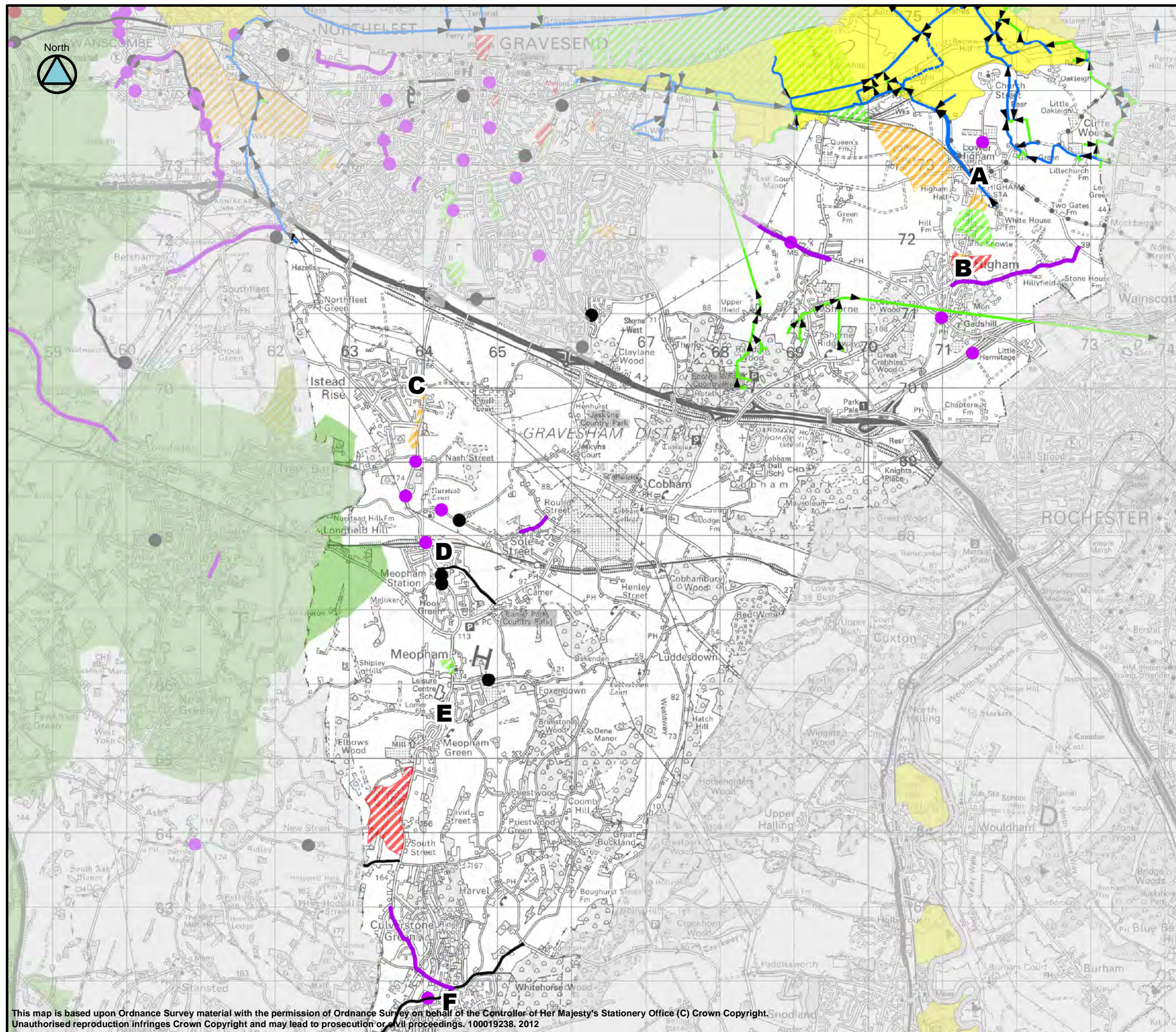


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Thameside Stage 1 SWMP

Watercourses and Drainage Systems
DA03



Legend

- Main River (EA) - open channel
- Main River (EA) - culverted
- Ordinary Watercourse - open channel
- Ordinary Watercourse - culverted
- A** Lower Higham
- B** Higham
- C** Istead Rise
- D** Hook Green & Meopham Station
- E** Meopham
- F** Vigo Village
- Historic flooding (other RMAs)***
- Other/Unknown
- Fluvial
- Groundwater
- Combined
- Surface Water
- Sewer
- Tidal

* Where an entire road has been highlighted in the historic layer; this does not mean that all the road has flooded in the past but rather no specific location was identified in the records received.

- Sewer Flooding Incidents (Thames Water)****
- Number of flood occurrences per postcode area**
- 1 - 3
- 4 - 6
- 7 - 8<
- Sewer Flooding Incidents (Southern Water)****
- Number of flood occurrences per postcode area**
- 1
- 2
- 3<

** Polygons only represent the postcode area and not the flood extent

Client:

Consultant:

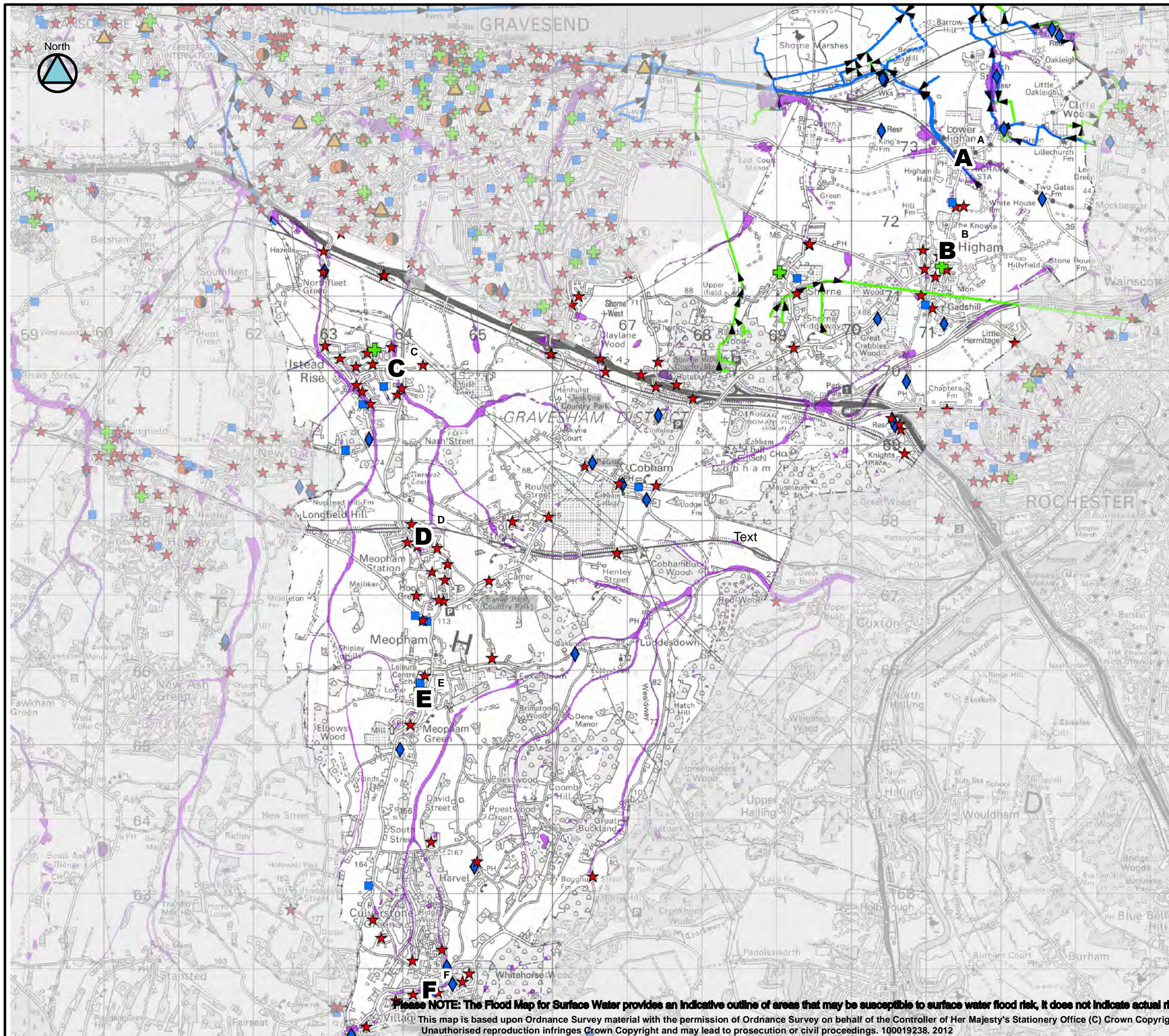
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Historical Flooding
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Legend

- Main River (EA) - open channel
- Main River (EA) - culverted
- Ordinary Watercourse - open channel
- Ordinary Watercourse - culverted
- Education
- Healthcare
- Emergency Services
- Nursing, Retirement Homes and Hospices
- Water Utilities
- Electricity, Gas and Communications

Receptors

- A** Lower Higham
- B** Higham
- C** Istead Rise
- D** Hook Green & Meopham Station
- E** Meopham
- F** Vigo Village


FMfSW 1 in 30yr AEP

- > 0.3m deep


FMfSW 1 in 200yr AEP

- > 0.3m deep







Client:



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Surface Water and Critical Infrastructure
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Please NOTE: The Flood Map for Surface Water provides an indicative outline of areas that may be susceptible to surface water flood risk, It does not indicate actual risk. This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office (C) Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. 100019238. 2012