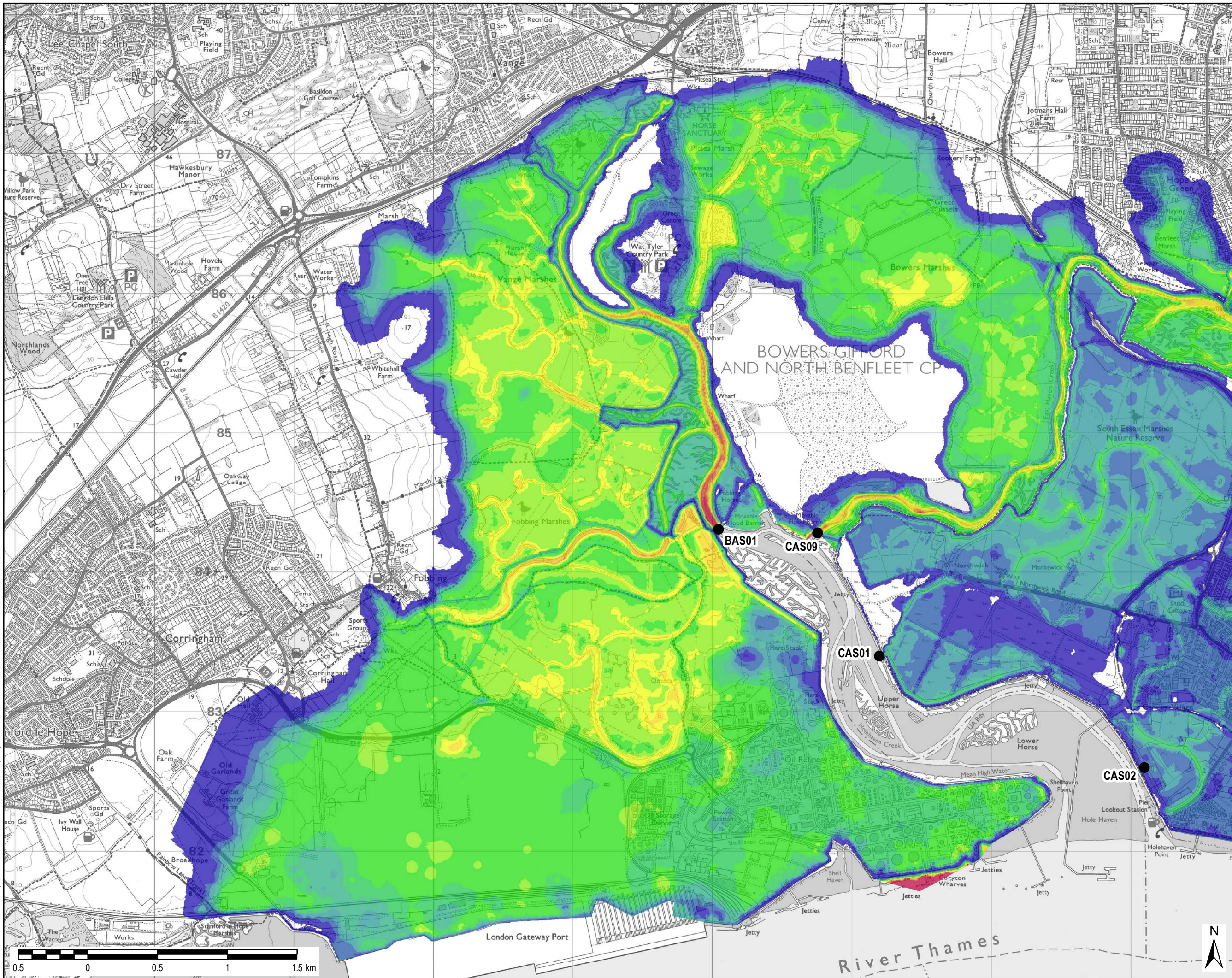


File Name: K:\5004 - Information Systems\60532482 - South Essex SFRA\02\_Maps\Figure E11\_Basildon Breach Maximum Flood Depth - 2016 0.1% AEP without barrier.mxd



THIS DRAWING IS TO BE USED ONLY FOR THE PURPOSE OF ISSUE THAT IT WAS ISSUED FOR AND IS SUBJECT TO AMENDMENT

**LEGEND**

● Breach Location

**Maximum Flood Depth (m)**

- > 0 to 0.5m
- > 0.5 to 1m
- > 1 to 1.5m
- > 1.5 to 2m
- > 2 to 2.5m
- > 2.5 to 3m
- > 3 to 3.5m
- > 3.5 to 4m
- > 4 to 4.5m
- > 4.5 to 5m
- > 5 to 5.5m
- > 5.5 to 6m
- > 6m

**NOTES**

Hydraulic modelling has been undertaken using 2D hydraulic modelling software MIKE21-HDFM (ver. 2009), to assess the effect of breaches at specified points and/or overtopping of defences. The model simulates 3 tidal cycles with the peak level occurring on the second peak and two slightly smaller peaks either side. Breaches in the defence walls are modelled to occur immediately before the peak tidal level to assess the potential impact of rapid inundation of floodwater. The maximum flood depth is calculated by subtracting the LIDAR topographic data from the peak water level achieved at each element in the model throughout the simulation. When using flood depth maps, it should be noted that they represent the flood depth arising from one or more specified breach locations, and that the depth will almost certainly vary spatially if the breach locations are in different local areas. Changes in inundation extent or maximum depth are non-linear to changes in breach location. It should be noted that the breach width and depth, though based on EA guidance, are arbitrary and do not necessarily represent the actual dimensions of a potential breach at a given location. A thorough description of methodology and assumptions is included within the SFRA Main Report.

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Purpose of Issue  
**FINAL**

Client  
**Basildon Council**  
BASILDON - BILLERICAY - WICKFORD  
**castlepoint**  
**Rochford District Council**  
**southend on sea**  
BOROUGH COUNCIL

Project Title  
**SOUTH ESSEX  
LEVEL 1 SFRA**

Drawing Title  
**BASILDON BREACH  
MAXIMUM FLOOD DEPTH  
2016, 0.1% AEP, WITHOUT BARRIER**

Drawn JW	Checked BB	Approved CP	Date 08/04/2018
AECOM Internal Project No. 60532482		Scale @ A3 1:25,000	

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**FIGURE E11**

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