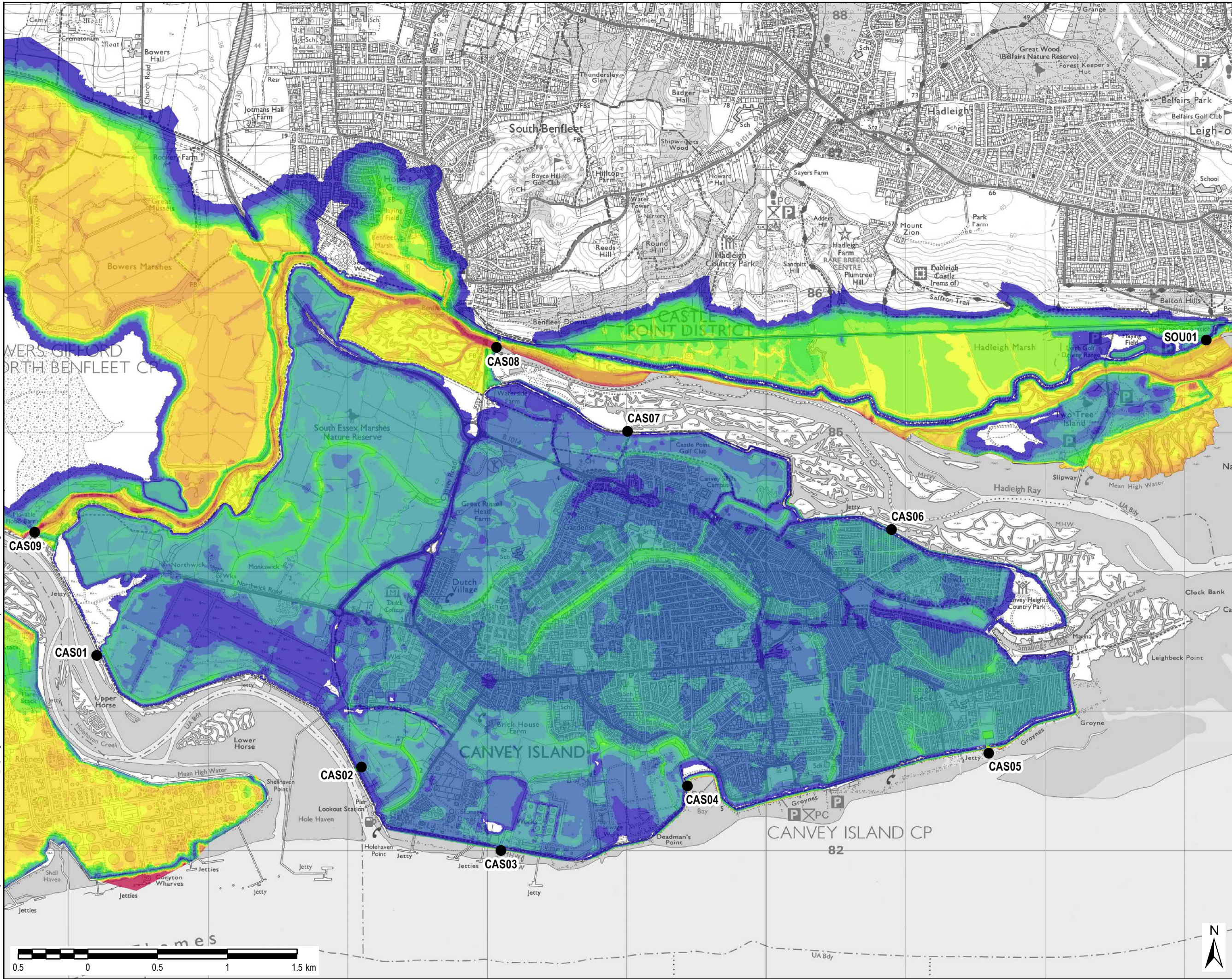


File Name: K:\15004 - Information Systems\60532482 - South Essex SFRA\02_Maps\Figure E30 Castle Point Breach Maximum Flood Depth - 2116 with climate change 0.1 AEP with barrier.mxd



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 - BILLERICA - WICKFORD
Castlepoint
Rochford District Council
southend on sea
BOROUGH COUNCIL

Project Title
**SOUTH ESSEX
LEVEL 1 SFRA**

Drawing Title
**CASTLE POINT BREACH
MAXIMUM FLOOD DEPTH
2116 WITH CLIMATE CHANGE
0.1% AEP, WITH 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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