

## D Flood durations for key access routes

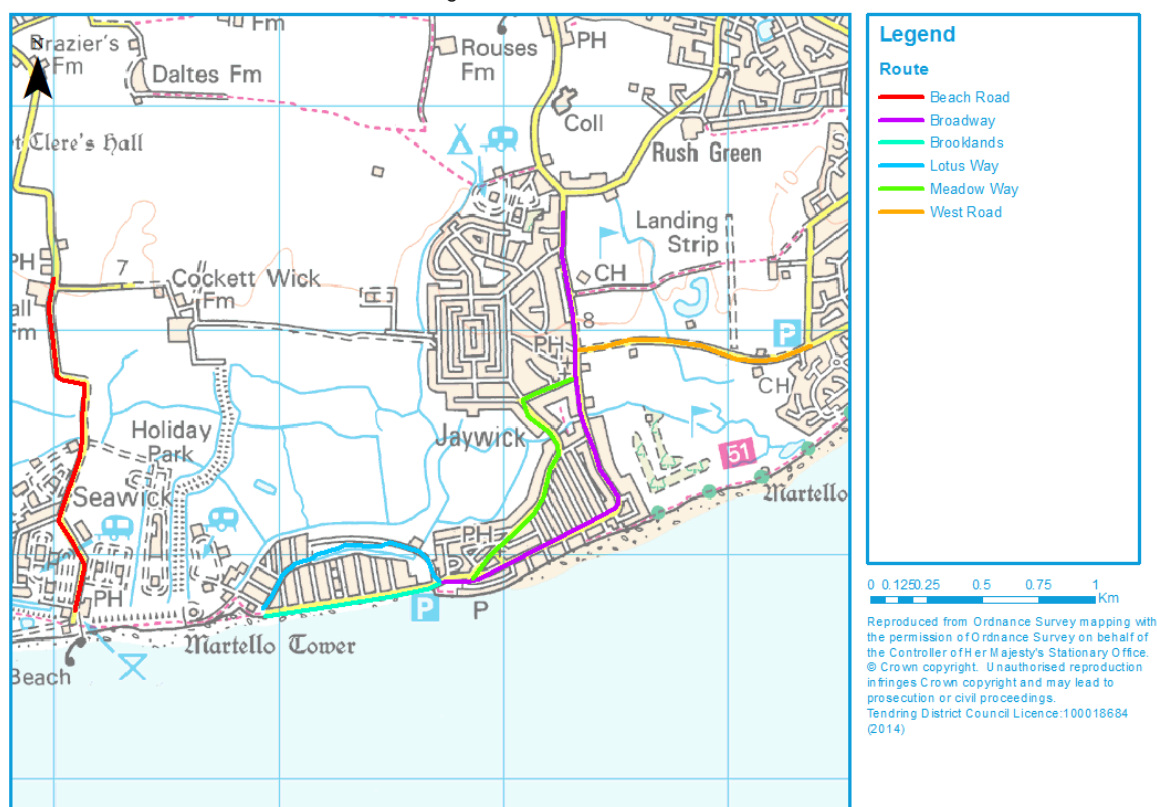
### D.1 Access and egress routes

Evacuation routes were specified in the modelling to provide information on the degree of inundation to the main access and egress routes within and around Jaywick, as well as providing information on the duration that routes are cut off during the modelled scenarios.

Note: the figures in the tables below relate to the duration of the modelled three tide cycle; flow routes may be flooded for longer durations in reality due to subsequent tide cycles and overtopping, or until breaches are repaired.

The evacuation routes modelled are shown in Figure D-1.

Figure D-1: Evacuation routes



### D.2 Overtopping

#### D.2.1 Current Day (0.5% AEP and 0.1% AEP)

Table D-1: Flood cut off durations for key access routes – current day

Event	Route	Flooding depth (m)	Approximate duration (hours)
0.5% AEP	No flooding of access routes		
0.1% AEP	Meadow Way	0.25	18.0

## D.2.2 Climate change (sea level rise) – 0.5% AEP

Table D-2: Flood cut off durations for key access routes – 0.5% AEP plus climate change (sea level rise)

Event	Climate change scenario	Route	Flooding Hazard (m)	Approximate duration (hours)		
0.5% AEP	2023	Broadway	0.25	0.5		
	2055	Brooklands	0.25	1.0		
		Broadway	0.25	3.0		
		Lotus Way	0.25	1.0		
		Meadow Way	0.25	19.5		
				0.25	22.0	
	2112	Brooklands		0.50	18.5	
				0.75	12.0	
				1.00	0.75	
			Broadway		0.25	31.0
					0.50	30.75
					0.75	30.75
					1.00	30.75
					1.50	19.0
					2.00	2.5
			Lotus Way		2.25	0.5
					0.25	31.5
					0.50	31.0
				0.75	31.0	
				1.00	30.5	
				1.50	19.0	
		Meadow Way		2.00	18.5	
				2.25	7.0	
				2.50	0.75	
			Beach Road		0.25	31.0
					0.50	31.0
					0.75	19.0
				1.00	18.75	
				1.50	18.25	
		West Road			0.25	1.0
				0.50	0.5	

### D.2.3 Climate change (sea level rise) – 1 in 1,000 year

Table D-3: Flood cut off durations for key access routes – 1 in 1,000 year climate change (sea level rise)

Event	Climate change scenario	Route	Flooding Hazard (m)	Approximate duration (hours)	
0.1% AEP	2023	Brooklands	0.25	0.25	
		Broadway	0.25	2.0	
		Meadow Way	0.25	19.25	
	2055	Brooklands	0.25	3.5	
		Broadway	0.25	19.35	
		Lotus Way	0.25	19.25	
		Meadow Way	0.25	20.25	
		Beach Road	0.25	6.75	
			0.50	4.0	
			0.75	4.0	
	2112	Brooklands	0.25	31.75	
			0.50	30.5	
			0.75	20.75	
			1.00	19.0	
			1.50	18.75	
			2.00	1.5	
			2.25	0.5	
			Broadway	0.25	31.25
				0.50	31.25
				0.75	31.0
				1.00	31.0
				1.50	31.0
				2.00	21.0
				2.25	19.0
			2.50	19.0	
			Lotus Way	0.25	31.5
				0.50	31.25
				0.75	31.25
				1.00	30.75
				1.50	30.75
				2.00	30.5
		2.25		23.75	
		2.50	19.5		
		Meadow Way	0.25	31.25	
			0.50	31.25	
			0.75	31.0	
			1.00	31.0	
			1.50	31.0	
			2.00	30.75	
			2.25	19.75	
		2.50	19.0		
		Beach Road	0.25	31.25	
0.50			31.25		
0.75			31.0		
1.00			31.0		
1.50			30.5		
2.00			30.0		
2.25			19.5		
2.50		19.0			
West Road		0.25	20.25		
		0.50	20.0		
		0.75	14.5		
	1.00	1.5			

## D.2.4 Breach Location A

Table D-4: Flood cut off durations for key access routes – Breach Location A

Event (tide level equivalent)	Route	Flooding Hazard (m)	Approximate duration (hours)	
			Breach	No breach
FW threshold	<b>NO ROADS CUT OFF</b>			
SFW threshold	<b>NO ROADS CUT OFF</b>			
Crest level of defence	Brooklands	0.25	21.75	22.0
		0.50	18.5	18.5
		0.75	9.5	12.0
		1.00	4.0	0.75
	Broadway	0.25	31.0	31.0
		0.50	31.0	30.75
		0.75	30.75	30.75
		1.00	20.75	30.75
		1.50	19.0	19.0
		2.00	8.75	2.5
		2.25	3.75	0.5
		2.50	1.0	-
	Lotus Way	0.25	31.25	31.5
		0.50	31.25	31.0
		0.75	30.25	31.0
		1.00	30.25	30.5
		1.50	18.75	19.0
		2.00	18.5	18.5
		2.25	15.5	7.0
		2.50	6.0	0.75
	Meadow Way	0.25	31.0	31.0
		0.50	30.75	31.0
		0.75	30.75	30.75
		1.00	30.5	30.75
		1.50	19.0	19.5
		2.00	18.5	18.5
		2.25	6.5	1.0
		2.50	2.5	-
	Beach Road	0.25	31.25	31.0
		0.50	31.0	31.0
		0.75	30.5	19.0
		1.00	18.75	18.75
		1.50	18.5	18.25
		2.00	18.25	-
		2.25	18.25	-
		2.50	13.5	-
	West Road	0.25	1.75	1.0
		0.5	0.5	0.5

## D.2.5 Breach Location B

Table D-5: Flood cut off durations for key access routes – Breach Location B

Event	Route	Flooding Hazard (m)	Approximate duration (hours)	
			Breach	No breach
FW threshold	<b>NO ROADS CUT OFF</b>			
SFW threshold	<b>NO ROADS CUT OFF</b>			
Crest level of defence	Brooklands	0.25	2.5	3.5
	Broadway	0.25	19.25	19.25
	Lotus Way	0.25	19.25	19.25
	Meadow Way	0.25	20.25	20.25
	Beach Road	0.25	20.0	6.75
		0.50	18.75	4.0
		0.75	18.75	4.0
		1.00	17.5	-

## D.2.6 Breach Location C

Table D-6: Flood cut off durations for key access routes – Breach Location C

Event	Route	Flooding Hazard (m)	Approximate duration (hours)		
			Breach	No breach	
FW threshold	Broadway	0.25	4.0	-	
	Lotus Way	0.25	18.5	-	
		0.50	17.75	-	
		0.75	6.0	-	
	Meadow Way	0.25	5.5	-	
		0.50	3.0	-	
SFW threshold	Broadway	0.25	10.0	-	
		0.50	5.5	-	
	Lotus Way	0.25	18.5	-	
		0.50	18.25	-	
		0.75	16.0	-	
		1.00	3.0	-	
	Meadow Way	0.25	15.75	-	
		0.50	6.5	-	
0.75		4.0	-		
Crest level of defence	Brooklands	-	3.5	3.5	
	Broadway	0.25	20.5	19.25	
		0.50	17.75	-	
		0.75	17.5	-	
		1.00	12.0	-	
	Lotus Way	0.25	21.5	19.25	
		0.50	18.75	-	
		0.75	18.5	-	
		1.00	18.5	-	
			1.5	6.0	-
	Meadow Way	0.25	20.0	20.25	
		0.50	18.0	-	
		0.75	17.75	-	
		1.00	15.0	-	
		1.50	0.5	-	
	Beach Road	0.25	7.0	6.75	
		0.5	2.25	4.0	