12th July 2021 GMMC224433AB

					Undefended					Defended					
Map Reference	Model Node Reference	Easting	Northing	Data	10 % AEP (1 in 10 year)	5 % AEP (1 in 20 year)	1.33 % AEP (1 in 75 year)	1 % AEP (1 in 100 year)	0.1 % AEP (1 in 1000 year)	10 % AEP (1 in 10 year)	5 % AEP (1 in 20 year)	1.33 % AEP (1 in 75 year)	1 % AEP (1 in 100 year)	0.1 % AEP (1 in 1000 year)	
1	ea013_Wirral_2011_BIR_10361	323482	389619	Modelled Water Level (m aodN)	4.06	4.15	4.36	4.39	4.70	3.95	4.08	4.34	4.39	4.72	
				Modelled Flow (cumecs)	1.69	1.72	1.78	1.81	2.19	1.79	1.84	1.90	1.94	2.23	
2	ea013_Wirral_2011_BIR_10087	323530	389873	Modelled Water Level (m aodN)	4.05	4.14	4.35	4.38	4.70	3.94	4.07	4.33	4.38	4.72	
2				Modelled Flow (cumecs)	1.68	1.71	1.77	1.81	2.16	1.78	1.83	1.95	1.92	2.19	
3	ea013_Wirral_2011_BIR_9874	323638	389998	Modelled Water Level (m aodN)	4.04	4.13	4.34	4.37	4.69	3.94	4.06	4.33	4.38	4.72	
				Modelled Flow (cumecs)	1.68	1.69	1.73	1.78	1.76	1.79	1.83	1.87	1.89	1.91	
4	ea013_Wirral_2011_BIR_9608	323858	390215	Modelled Water Level (m aodN)	4.04	4.12	4.34	4.37	4.69	3.92	4.05	4.33	4.38	4.72	
				Modelled Flow (cumecs)	2.40	2.46	2.54	2.55	2.42	2.57	2.78	3.02	3.04	2.86	

Model data taken from Birket, Fender and Arrowe Brook Fluvial 2011 Study

AEP - Annual Exceedence Probability

m aodN - metres above ordnance datum Newlyn

cumecs - cubic metres per second

Notes: Climate Change Scenario - We do not hold climate change measurements at this location. For further guidance on climate change within the GMMC area please see the attachment 'Flood risk assessments: Climate change allowances'. Particularly section 3, table B which shows the Local precautionary allowances for potential climate change impacts.

					Undefended						Defended							
Map Reference	Model Node Reference	Easting	Northing	Data	50 % AEP (1 in 2 year)	10 % AEP (1 in 10 year)	1.33 % AEP (1 in 75 year)	1 % AEP (1 in 100 year)	0.5 % AEP (1 in 200 year)	0.5 % AEP (1 in 200 year + Climate Change)	0.1 % AEP (1 in 1000 year)	50 % AEP (1 in 2 year)	10 % AEP (1 in 10 year)	1.33 % AEP (1 in 75 year)	1 % AEP (1 in 100 year)	0.5 % AEP (1 in 200 year)	0.5 % AEP (1 in 200 year + Climate Change)	0.1 % AEP (1 in 1000 year)
1	ea013_Model_Wirral_BIR_10361	323482	389619	Modelled Water Level (m aodN)	4.47	4.88	5.56	5.64	5.78	6.59	6.01	3.18	3.18	3.18	3.18	3.18	3.22	3.18
2	ea013_Model_Wirral_BIR_10087	323530	389873	Modelled Water Level (m aodN)	4.48	5.08	5.58	5.66	5.80	6.64	6.04	3.14	3.14	3.14	3.14	3.14	3.19	3.14
3	ea013_Model_Wirral_BIR_9874	323638	389998	Modelled Water Level (m aodN)	4.49	5.14	5.58	5.66	5.80	6.65	6.05	3.10	3.10	3.10	3.10	3.10	3.16	3.10
4	ea013_Model_Wirral_BIR_9608	323858	390215	Modelled Water Level (m aodN)	4.49	5.15	5.58	5.66	5.81	6.67	6.06	3.07	3.07	3.07	3.07	3.07	3.09	3.07

 Map Reference
 Model Node Reference
 Easting
 Northing
 Data
 0.5 % AEP (1 in 200 year)
 0.1 % AEP (1 in 1000 year)

 5
 2D Level
 323385
 390176
 Modelled Water Level (m aodN)
 5.79
 6.04

 323401
 390185
 Modelled Water Level (m aodN)
 5.78
 6.03

Model data taken from Wirral Tidal 2015 Study

AEP - Annual Exceedence Probability

m aodN - metres above ordnance datum Newlyn

cumecs - cubic metres per second

*The impact of climate change was assessed by simulating a 200-year event including an increase in predicted sea-level rise up to the year 2115 based on the latest UKCP09 guidance.

Flood Defences

Start Date	Asset Type	Asset ID	Standard of Protection	Upstream Actual Crest Level (m aod)	Downstream Actual Crest Level (m aod)		
01/01/1980	Embankment	398854	200	7.29	9.04		
01/01/1997	High Ground	122773	100	2.96	3.46		
01/01/1997	High Ground	123849	100	3.54	3.46		
01/01/1997	High Ground	131902	100	3.01	2.96		
01/01/1997	Embankment	179025	100	5.28	5.28		

Please note that the site is within/partially within a tidal Area Benefiting from Defences. The protection is offered by the coastal defences at the head of the Wirral and these were included in our modelling. However these are maintained by Wirral Council and as third party assets, their location is not shown on our Flood Map for Planning nor do we hold details regarding their crest levels or condition. We therefore recommend you contact the Coastal Defence Team at Wirral Borough Council on 0151 606 2000 (switchboard) or email Ilfa@wirral.gov.uk if you require such information.