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From: Adam King [REDACTED]
Sent: 13 March 2025 17:05
To: Harry Chalk <Harry.Chalk@arun.gov.uk>
Subject: LU/36/25/PL 7 Roman Acre - Flood Risk Assessment Response

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Hi Harry,

We noted that there was an Environment Agency objection dated 11th March 2025 put up on the Arun website today. This notes a number of issues with the submitted FRA.

We have provided this information to CEP who produced the Flood Risk Assessment and asked them to provide a response to the specific points raised which is attached.

We believe that the Environment Agency has not reviewed the Flood Risk Assessment in sufficient detail as all of the points raised appear to have been dealt with within the submission.

The attached Designers Response (dated today) sets out clearly where in the current FRA the points in the objection are dealt with, including the flood events reviewed, the impact of climate change and how the finished floor levels were specifically set to mitigate against the future year climate change adjusted flood event.

As such, given the submitted FRA deals with all of the points that the Environment Agency objection raises, this should be sufficient for this objection to be removed.

As there was no direct correspondence details for Mrs Sophie Brown, could I please ask that you provide this response to the Environment Agency without delay to ensure that the objection is removed?

I look forward to confirmation that you have received this additional information.

Thank you.

Kind Regards

Adam King BA (Hons) BArch
Director

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Designer's Response



Project	Roman Acre, Wick, Littlehampton
Project Number	23953
Comments Received from	Environment Agency Letter 11 March 2025
Date of Response	13 March 2025

Comment / Query	Designer's response
<p>The submitted FRA (Flood Risk Assessment, On behalf of Jeff Djevdet, Project Number 23953, dated January 2025) does not comply with the requirements for site-specific flood risk assessments, as set out in paragraphs 20 to 21 of the Flood Risk and Coastal Change planning practice guidance and its site-specific flood risk assessment checklist.</p> <p>The FRA does not therefore adequately assess the flood risks posed by the development. In particular, the FRA fails to:</p>	
<p>1</p> <ul style="list-style-type: none"> consider how a range of flooding events (including extreme events) will affect people and property 	<p>Sections 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8 and 4.1.9 of the submitted the Flood Risk Assessment v1.0 clearly notes the flood level data supplied by the Environment Agency and how the current climate change allowances and sea level rise have been applied to the 2012 data supplied together with the site specific flood levels for the years 2012, 2025 and 2125 detailing the 1:1,000 and 1:200 flood levels for each year, the climate change allowances having been applied to the current year 2025 and 2125.</p>



Comment / Query	Designer's response
	<p>Section 5 of the Flood Risk Assessment v1.0 discussed the flooding potential to the site from the Future Year 200 year tidal events with climate change and confirms the risk to the site is low with negligible risk to the dwelling even in the event the defences fail.</p> <p>The Flood Risk Assessment considers all forms of flooding. Only tidal flooding poses a potential risk to the site. With tidal flood risk there will be no sea level rise or any residual risk to the surrounding catchment if the development proceeds.</p> <p>The Flood Risk Assessment has clearly considered the appropriate range of flooding events including extreme events and how they affect the site.</p>
<p>2</p> <ul style="list-style-type: none"> • take the impacts of climate change into account 	<p>Sections 4.1.4, 4.1.5, 4.1.6, 4.1.7, 4.1.8 and 4.1.9 note the flood level data supplied by the Environment Agency and how the current climate change allowances and sea level rise have been applied to the 2012 data supplied together with the site specific flood levels for the years 2012, 2025 and 2125 detailing the 1:1,000 and 1:200 flood levels for each year, the climate change allowances have been applied to the current year 2025 and 2125 levels.</p> <p>The Flood Risk Assessment has clearly taken the impacts of Climate Change into account.</p> <p>At the rear of this response is the sea level rise calculation for reference.</p>
<p>3</p> <p>Flood risk mitigation measures to address flood risk for the lifetime of the development included in the design are inadequate because they will not make the development resilient to the flood levels for the 0.5% event including climate change to 2125. Consequently the development proposes inadequate finished floor levels including freeboard.</p>	<p>Section 6.2 details Future Flood Risk Mitigation and confirms finished floor levels at ground floor level will be set above the future year plus climate change flood level of 4.833m AOD at 4.850m AOD. It also notes first floor sleeping accommodation at 7.55m AOD, 2.717m above the 2125 1:200 year tidal flood level.</p> <p>Both of these mitigate risk to the dwelling and its occupants.</p> <p>The site is located in an area benefitting from flood defences as set out in Section 4.3 of the Flood Risk Assessment.</p>

Comment / Query	Designer's response
	<p>The existing defences have crest heights at 4.4m and 4.8m AOD and are within an area of 'hold the line' and 'maintain / replace' policy in regard to those defences. The risk of removal / failure of those defences is extremely low.</p> <p>The climate change adjusted future predicted flood level is 4.833m AOD for the Higher Central Risk and therefore 33mm higher than the closest existing defence and 433mm higher than the lower defence at 4.4m AOD.</p> <p>There is a residual risk of overtopping of the defences. It is unlikely even if the defences were overtopped that there would be any wave action at the extreme of the tidal flood extent, where this site is located, and therefore no requirement for freeboard to be applied to the finished floor levels.</p> <p>The finished floor levels have been set above the climate change adjusted future 2125 1:200 year tidal flood level such that the finished floor level would remain above that future climate change adjusted tidal flood event if the defences were to completely fail.</p> <p>The finished floor levels proposed are appropriate to mitigate the low risk of tidal flooding at this development.</p>
<p><u>Overcoming our objection</u></p> <p>To overcome our objection, the applicant should submit a revised FRA which addresses the points highlighted above</p>	<p>We have detailed / clarified above where the information requested is already contained within the submitted Flood Risk Assessment.</p>

EA Base Data from

2012 model

Sea Level

3.7 m AOD

Sea Level Rise

<https://www.gov.uk/guidance/food-risk-assessments-climate-change-allowances>

2000	to	2035	3.7 mm
2036	to	2065	3.7 mm
2066	to	2095	3.8 mm
2096	to	2125	3.8 mm

2012 3.700 m AOD

Year	Model	Higher central
2013	1.0	3.706 m AOD
2014	1.0	3.711 m AOD
2015	1.0	3.717 m AOD
2016	1.0	3.723 m AOD
2017	1.0	3.729 m AOD
2018	1.0	3.734 m AOD
2019	1.0	3.740 m AOD
2020	1.0	3.746 m AOD
2021	1.0	3.751 m AOD
2022	1.0	3.757 m AOD
2023	1.0	3.763 m AOD
2024	1.0	3.768 m AOD
2025	1.0	3.774 m AOD
2026	1.0	3.780 m AOD
2027	1.0	3.786 m AOD
2028	1.0	3.791 m AOD
2029	1.0	3.797 m AOD
2030	1.0	3.803 m AOD
2031	1.0	3.808 m AOD
2032	1.0	3.814 m AOD
2033	1.0	3.820 m AOD
2034	1.0	3.825 m AOD
2035	1.0	3.831 m AOD
2036	1.0	3.840 m AOD
2037	1.0	3.849 m AOD
2038	1.0	3.857 m AOD
2039	1.0	3.866 m AOD
2040	1.0	3.875 m AOD
2041	1.0	3.883 m AOD
2042	1.0	3.892 m AOD
2043	1.0	3.901 m AOD
2044	1.0	3.909 m AOD
2045	1.0	3.918 m AOD
2046	1.0	3.927 m AOD
2047	1.0	3.936 m AOD
2048	1.0	3.944 m AOD
2049	1.0	3.953 m AOD
2050	1.0	3.962 m AOD
2051	1.0	3.970 m AOD
2052	1.0	3.979 m AOD
2053	1.0	3.988 m AOD
2054	1.0	3.996 m AOD
2055	1.0	4.005 m AOD
2056	1.0	4.014 m AOD
2057	1.0	4.023 m AOD
2058	1.0	4.031 m AOD

EA predicted Sea Level Rise					
Area of England		2000 to 2035 (mm)	2036 to 2065 (mm)	2066 to 2095 (mm)	2096 to 2125 (mm)
Anglian	Higher central	5.8	8.7	11.6	13
South east	Higher central	5.7	8.7	11.6	13.1
South west	Higher central	5.8	8.8	11.7	13.1
Northumbria	Higher central	4.6	7.5	10.1	11.2
Humber	Higher central	5.5	8.4	11.1	12.4
North west	Higher central	4.5	7.3	10	11.2

2059	87	4.040 m AOD
2060	100	4.049 m AOD
2061	87	4.057 m AOD
2062	100	4.066 m AOD
2063	87	4.075 m AOD
2064	87	4.083 m AOD
2065	100	4.092 m AOD
2066	25.0	4.104 m AOD
2067	13.6	4.115 m AOD
2068	11.8	4.127 m AOD
2069	13.1	4.139 m AOD
2070	13.6	4.150 m AOD
2071	25.0	4.162 m AOD
2072	13.6	4.173 m AOD
2073	11.8	4.185 m AOD
2074	13.1	4.197 m AOD
2075	13.6	4.208 m AOD
2076	25.0	4.220 m AOD
2077	13.6	4.231 m AOD
2078	21.0	4.243 m AOD
2079	13.1	4.255 m AOD
2080	13.6	4.266 m AOD
2081	13.1	4.278 m AOD
2082	13.6	4.289 m AOD
2083	21.0	4.301 m AOD
2084	13.1	4.313 m AOD
2085	13.6	4.324 m AOD
2086	13.1	4.336 m AOD
2087	13.6	4.347 m AOD
2088	21.0	4.359 m AOD
2089	13.1	4.371 m AOD
2090	11.8	4.382 m AOD
2091	13.1	4.394 m AOD
2092	13.6	4.405 m AOD
2093	21.0	4.417 m AOD
2094	13.6	4.428 m AOD
2095	11.8	4.440 m AOD
2096	13.1	4.453 m AOD
2097	11.1	4.466 m AOD
2098	13.1	4.479 m AOD
2099	11.1	4.492 m AOD
2100	13.1	4.506 m AOD
2101	13.1	4.519 m AOD
2102	13.1	4.532 m AOD
2103	13.1	4.545 m AOD
2104	11.1	4.558 m AOD
2105	13.1	4.571 m AOD
2106	13.1	4.584 m AOD
2107	13.1	4.597 m AOD
2108	13.1	4.610 m AOD
2109	11.1	4.623 m AOD
2110	13.1	4.637 m AOD
2111	13.1	4.650 m AOD
2112	13.1	4.663 m AOD
2113	13.1	4.676 m AOD
2114	11.1	4.689 m AOD
2115	13.1	4.702 m AOD
2116	13.1	4.715 m AOD
2117	13.1	4.728 m AOD

2118	1:1	4.741 m AOD
2119	1:1	4.754 m AOD
2120	1:1	4.768 m AOD
2121	1:1	4.781 m AOD
2122	1:1	4.794 m AOD
2123	1:1	4.807 m AOD
2124	1:1	4.820 m AOD
2125	1:1	4.833 m AOD