



Lancaster City Council
Level 1 SFRA Local Plan Sites Assessment

28 September 2021

Proposed Use
Residential
Employment
Mixed Use
Commercial
Residential / Education
Employment / Education
Recreation & Environmental Improvements
TOTAL

Key

Flood Zone 3b	The colour coding shows the highest risk element of the flood zone that is present on site and is not in itself an indication of whether the site should or shouldn't be developed for flooding reason
Flood Zone 3a	
Flood Zone 2	
Flood Zone 1 + Surface Water	
Flood Zone 1	

Site Reference	Site Name
DOS5 (also H2)	Middleton Towers, Carr Lane

H1.1	Land at New Quay Road, Lancaster
H1.3	Former Police Station, Heysham Road
H1.4	Land West of Middleton Road, Heysham
H2.1	Royal Oak Meadow, Hornby
H2.2	Lancaster Road, Overton
H2.3	Yenham Lane, Overton
H2.5	Land north of Old Hall Farm, Over Kellet
H2.6	Halton Mills, Halton
H2.8	Land between Low Road and Forge Lane, Halton
H2.9	Land to the rear of Pointer Grove and adjacent to High Road, Halton
H2.10	Land South of Marsh Lane, Cockerham
H3.1 (also H1)	Former Ridge Lea Hospital, Lancaster
H3.2 (also H1)	Land at Stone Row Head Farm, East Lancaster
H3.3 (also H1 & EC6)	Land at University of Cumbria Campus, East Lancaster
H4 (also H1)	Land at Grab Lane, East Lancaster

H5 (also H1)	Land at Leisure Park/Auction Mart, Wyresdale Road
H6 (also H1)	Royal Albert Fields, Ashton Road
SG11 (also H1)	Lundsfield Quarry, South Carnforth
EC6 (also H3.3 & H1)	University of Cumbria Campus, Lancaster

Summary Table

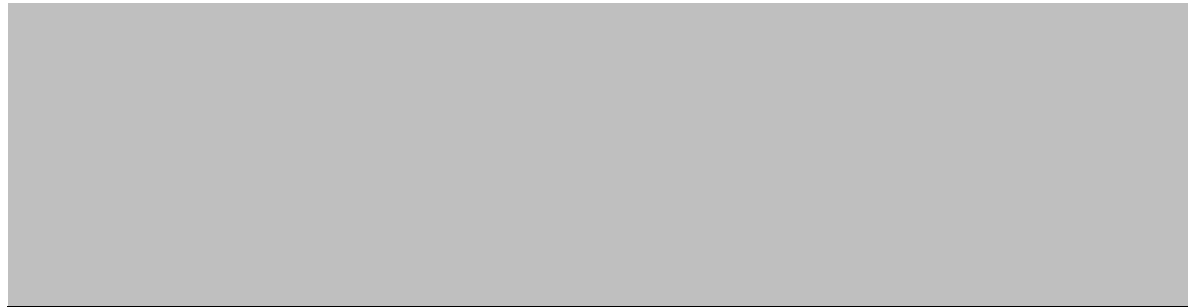
		Flood Zone 1			Flood Zone 2
Number of Sites	Area (ha)	Area (ha)	No. 100%	Area (ha)	
19	92.17	81.90	9	2.33	
6	213.59	138.75	0	10.23	
8	316.45	294.56	1	2.91	
1	1.65	0.49	0	0.63	
1	5.67	5.67	1	0.00	
1	10.97	10.69	0	0.00	
1	2.43	0.15	0	0.50	
37	642.94	532.22	11	16.61	

Main Table

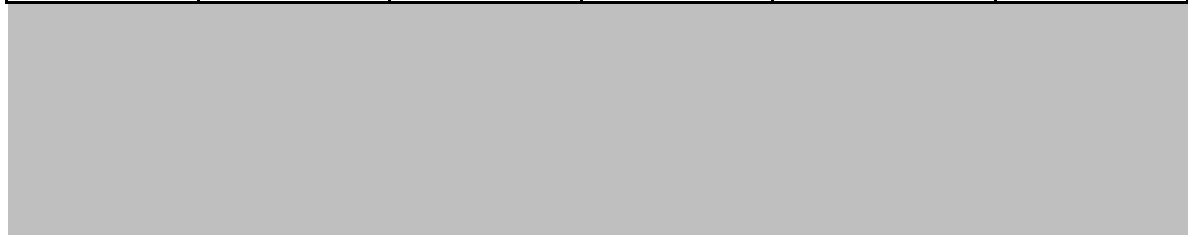
		Flood Zone 1			Flood Zone 2
Proposed Use	Area (ha)	Area (ha)	%	Area (ha)	
Residential	19.559	13.926	71.199	0.887	

Residential	0.373	0.000	0.000	0.000
Residential	0.060	0.060	100.000	0.000
Residential	2.175	2.175	100.000	0.000
Residential	1.126	1.126	100.000	0.000
Residential	1.644	1.578	96.014	0.055
Residential	0.702	0.702	100.000	0.000
Residential	3.506	3.493	99.606	0.000
Residential	2.858	1.755	61.423	1.085
Residential	5.243	5.085	96.989	0.003
Residential	4.336	4.221	97.346	0.000
Residential	1.983	1.983	100.000	0.000
Residential	3.240	3.240	100.000	0.000
Residential	1.618	1.618	100.000	0.000
Residential	1.537	1.537	100.000	0.000
Residential	8.777	8.001	91.167	0.173

Residential	13.936	11.936	85.651	0.132
Residential	5.809	5.809	100.000	0.000
Residential	13.691	13.651	99.709	0.000
Residential/Education	5.672	5.672	100.000	0.000



Fluvial Flood Zone Coverage					
Zone 2	Flood Zone 3a		Flood Zone 3b		Low Risk (0.1%)
No.	Area (ha)	No.	Area (ha)	No.	Area (ha)
6	5.32	7	2.63	9	6.94
4	61.30	4	3.31	6	22.49
5	10.13	1	8.84	4	17.45
1	0.53	1	0.00	0	0.77
0	0.00	0	0.00	0	0.12
0	0.00	0	0.28	1	2.05
1	1.62	1	0.15	1	0.14
17	78.90	14	15.22	21	49.94



Fluvial Flood Zone Coverage					
Zone 2	Flood Zone 3a		Flood Zone 3b		Low Risk (0.1%)
%	Area (ha)	%	Area (ha)	%	Area (ha)
4.536	4.431	22.655	0.315	1.611	1.512

0.000	0.357	95.670	0.016	4.330	0.000	
0.000	0.000	0.000	0.000	0.000	0.000	
0.000	0.000	0.000	0.000	0.000	0.021	
0.000	0.000	0.000	0.000	0.000	0.027	
3.321	0.011	0.665	0.000	0.000	0.000	
0.000	0.000	0.000	0.000	0.000	0.000	
0.000	0.000	0.000	0.014	0.394	0.238	
37.974	0.017	0.602	0.000	0.001	0.517	
0.053	0.053	1.015	0.102	1.944	0.365	
0.000	0.000	0.000	0.115	2.654	0.316	
0.000	0.000	0.000	0.000	0.000	0.000	
0.000	0.000	0.000	0.000	0.000	0.062	
0.000	0.000	0.000	0.000	0.000	0.000	
0.000	0.000	0.000	0.000	0.000	0.000	
1.971	0.297	3.384	0.305	3.477	1.085	

0.946	0.149	1.070	1.719	12.333	1.800	
0.000	0.000	0.000	0.000	0.000	0.025	
0.000	0.000	0.000	0.040	0.291	0.969	
0.000	0.000	0.000	0.000	0.000	0.116	

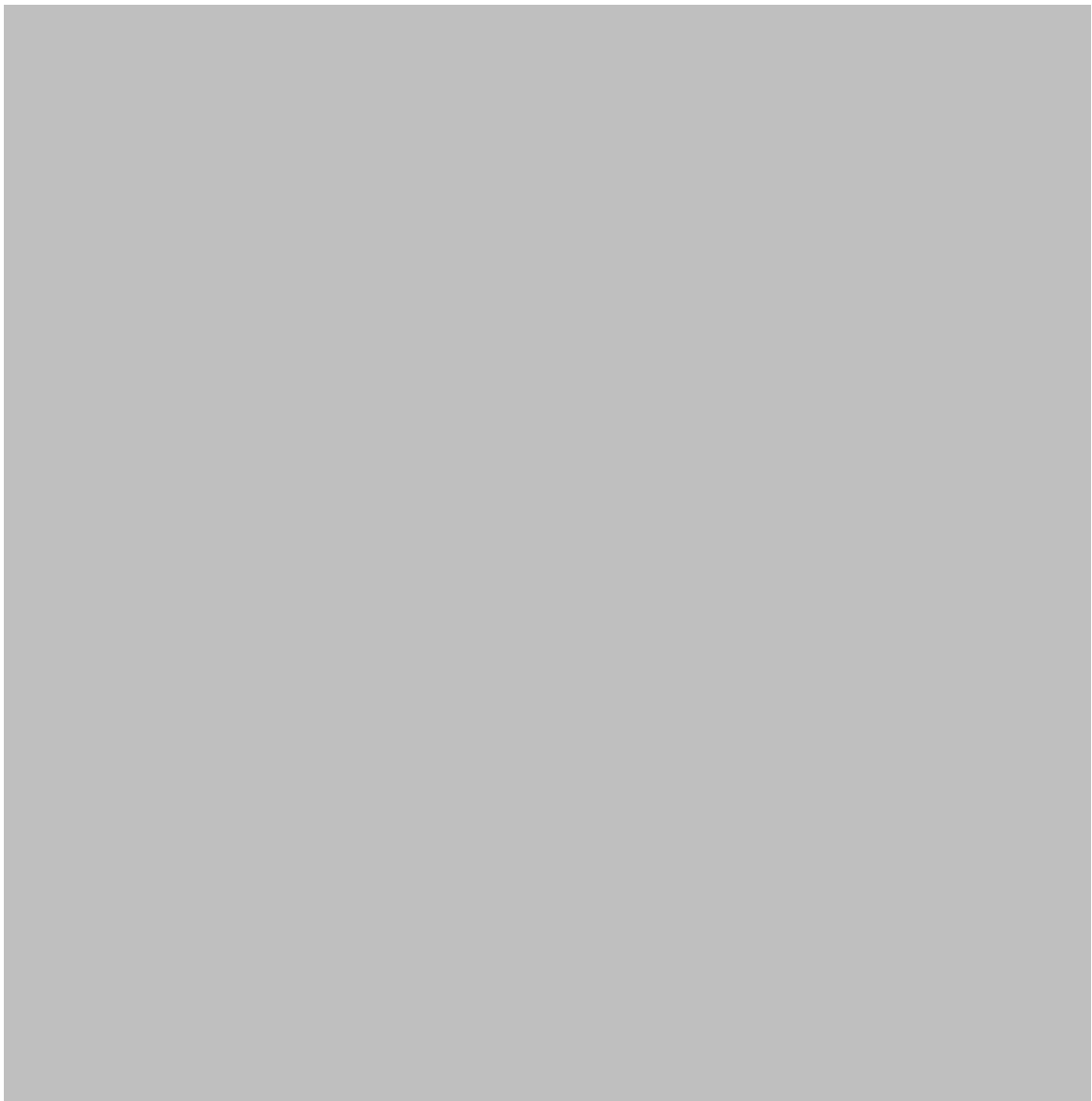
P_24.3

Risk of Flooding from Surface Water				
% AEP outline)	Medium Risk (1% AEP outline)		High Risk (3.33% AEP outline)	
No.	Area (ha)	No.	Area (ha)	No.
14	2.27	9	1.09	7
6	6.65	5	3.03	3
8	6.40	8	4.30	7
1	0.34	1	0.22	1
1	0.03	1	0.00	0
1	1.31	1	0.74	1
1	0.06	1	0.04	1
32	17.06	26	9.42	20

Risk of Flooding from Surface Water					
% AEP outline)	Medium Risk (1% AEP outline)		High Risk (3.33% AEP outline)		Significant Surface Water Risk?
%	Area (ha)	%	Area (ha)	%	
7.730	0.479	2.447	0.167	0.855	No

0.000	0.000	0.000	0.000	0.000	0.000	No
0.008	0.000	0.000	0.000	0.000	0.000	No
0.986	0.000	0.000	0.000	0.000	0.000	No
2.421	0.006	0.572	0.000	0.000	0.000	No
0.000	0.000	0.000	0.000	0.000	0.000	No
0.000	0.000	0.000	0.000	0.000	0.000	No
6.776	0.036	1.023	0.021	0.600	0.000	No
18.079	0.212	7.408	0.079	2.764	0.000	No
6.959	0.080	1.528	0.000	0.000	0.000	No
7.298	0.156	3.595	0.097	2.234	0.000	No
0.005	0.000	0.000	0.000	0.000	0.000	No
1.926	0.000	0.000	0.000	0.000	0.000	No
0.000	0.000	0.000	0.000	0.000	0.000	No
0.000	0.000	0.000	0.000	0.000	0.000	No
12.362	0.145	1.653	0.061	0.696	0.000	No

12.917	0.795	5.705	0.500	3.586	No	
0.428	0.000	0.000	0.000	0.000	No	
7.079	0.359	2.619	0.167	1.221	No	
2.038	0.034	0.606	0.000	0.000	No	



Risk from Climate Change?	Cumulative Impact Assessment ranking	Flood Risk Vulnerability Classification (NPPF)
High risk based on modelling Within Lune Tidal 0.5% AEP +CC70 and +CC95 outlines	High	More vulnerable

High risk based on modelling Within Lune Tidal 0.5% AEP +CC70 and +CC95 outlines Within Lune SFRM 2011 5% +CC45, CC60, CC75 and 1% +CC45, CC60 and CC75 outlines	High	More vulnerable
Very low probability	High	More vulnerable
Very low probability	High	More vulnerable
Very low probability	High	More vulnerable
High risk based on modelling Within Lune Tidal 0.5% AEP +CC70 and +CC95 outlines	High	More vulnerable
Very low probability	High	More vulnerable
Medium probability as at existing risk	Medium	More vulnerable
High risk based on modelling Within Lune SFRM 2011 5% +CC45, CC60, CC75 and 1% +CC45, CC60 and CC75 outlines	High	More vulnerable
High risk based on modelling Within Lune SFRM 2011 5% +CC45, CC60, CC75 and 1% +CC45, CC60 and CC75 outlines	High	More vulnerable
Medium probability as at existing risk	High	More vulnerable
Very low probability	High	More vulnerable
Very low probability	High	More vulnerable
Very low probability	High	More vulnerable
Very low probability	High	More vulnerable
High risk based on modelling Within Burrow Beck 2019 5% AEP +CC45, CC60, CC75 and 1% AEP +CC45, CC60, CC75 outlines	High	More vulnerable

High risk based on modelling Within Burrow Beck 2019 5% AEP +CC45, CC60, CC75 and 1% AEP +CC45, CC60, CC75 outlines	High	More vulnerable
Very low probability	High	More vulnerable
High risk based on modelling Within Back Lane 2020 1% AEP +CC45, CC60 and CC75 outlines	High	More vulnerable
Very low probability	High	More vulnerable



Level 1 Strategic Recommendation (see Appendix C)	Development Considerations
Strategic Recommendation A	FRA required

Strategic Recommendation A	FRA required
N/A - site has planning permission	N/A - site has planning permission
N/A - site has planning permission	N/A - site has planning permission
N/A - site has planning permission	N/A - site has planning permission
Strategic Recommendation A	FRA required
Strategic Recommendation C	FRA not required
N/A - site has planning permission	N/A - site has planning permission
N/A - site has planning permission	N/A - site has planning permission
N/A - site has planning permission	N/A - site has planning permission
N/A - site has planning permission	N/A - site has planning permission
Strategic Recommendation B	FRA required
Strategic Recommendation B	FRA required
Strategic Recommendation B	FRA required
Strategic Recommendation B	FRA required
Strategic Recommendation A	FRA required

Strategic Recommendation A	FRA required
N/A - site has planning permission	N/A - site has planning permission
Strategic Recommendation A	FRA required
Strategic Recommendation B	FRA required

Recommended Next Steps

Flood risk should be managed through careful consideration of site layout and design early on in the planning stage through a detailed FRA. The functional floodplain should remain free of development

Flood risk should be managed through careful consideration of site layout and design early on in the planning stage through a detailed FRA. The functional floodplain should remain free of development

N/A - site has planning permission

N/A - site has planning permission

N/A - site has planning permission

Flood risk should be manageable through careful consideration of site layout and design around the flood risk early on in the planning stage through a detailed FRA

Planning application should not require a FRA given very low risk

N/A - site has planning permission

N/A - site has planning permission

N/A - site has planning permission

N/A - site has planning permission

Site can progress to FRA stage to assess surface water risk

Site can progress to FRA stage to assess surface water risk

Site can progress to FRA stage

Site can progress to FRA stage

Flood risk should be managed through careful consideration of site layout and design early on in the planning stage through a detailed FRA. The functional floodplain should remain free of development

Flood risk should be managed through careful consideration of site layout and design early on in the planning stage through a detailed FRA. The functional floodplain should remain free of development

N/A - site has planning permission

Flood risk should be managed through careful consideration of site layout and design early on in the planning stage through a detailed FRA. The functional floodplain should remain free of development

Site can progress to FRA stage to assess surface water risk

Local Authority Assessment

The site is allocated in the Local Plan (2020), the allocation is not being reviewed through the CELPR. The flood risk has increased since the 2017 SFRA and allocation and the site now includes Flood Zone 3b. Development within FZ3b should be avoided and an Exception Test will be required with a planning application where development falls within the categories in Table 3: flood risk vulnerability and flood zone compatibility (PPG). A FRA will be required with a planning application. Development should be located sequentially across the site taking account of all sources and levels of flood risk. Mitigation, resilience and a full surface water strategy will be required. The site has planning permission for development. As development would support redevelopment and completion of this site and subject to appropriate mitigation to ensure that the development is safe and opportunities are taken to reduce flood risk, the development of this site is, on balance, likely to pass an Exception Test.

The site is allocated in the Local Plan (2020), the allocation is not being reviewed through the CELPR. The site has previously benefited from planning permission. The flood risk has increased since the 2017 SFRA and allocation, the site now includes Flood Zone 3b. It is however, located behind flood defences along the River Lune. Development within FZ3b should be avoided and an Exception Test will be required with a planning application where development falls within the categories in Table 3: flood risk vulnerability and flood zone compatibility (PPG). A FRA will be required with a planning application. Development should be located sequentially across the site taking account of all sources and levels of flood risk. Mitigation, resilience and a full surface water strategy will be required. The site is adjacent to housing and an area designated for regeneration. Subject to appropriate mitigation to ensure that the development is safe and will not increase risk, the development, on balance, is likely to pass an Exception Test.

The site has an extant planning permission.

The site has planning permission.

The site has planning permission.

The site has planning permission and is under construction.

The site is at low risk and is allocated for development in the Local Plan (2020).

The site has planning permission.

Part of the site has planning permission and part of the site has a resolution to grant planning permission subject to a S106.

The site has planning permission and is under construction.

The site has planning permission and is under construction.

The site has planning permission.

Applications should be accompanied by a FRA.

Applications should be accompanied by a FRA.

Part of the site has planning permission. Applications for the remainder should be accompanied by a FRA.

The site is allocated in the Local Plan (2020), the allocation is not being reviewed through the CELPR. The flood risk has increased since the 2017 SFRA and allocation, the site now includes Flood Zone 3b. Development within FZ3b should be avoided and an Exception Test will be required with a planning application where development falls within the categories in Table 3: flood risk vulnerability and flood zone compatibility (PPG). Development should be located and designed to take account of all sources and levels of flood risk. Mitigation, resilience and a full surface water strategy will be required. The site is allocated for housing, subject to wider sustainability benefits, appropriate mitigation to ensure that the development is safe and measures to reduce flood risk, the development, on balance, is likely to pass an Exception Test.

The site is allocated in the Local Plan (2020), the allocation is not being reviewed through the CELPR. The flood risk has increased since the 2017 SFRA and allocation, the site now includes Flood Zone 3b. Development within FZ3b should be avoided and an Exception Test will be required with a planning application where development falls within the categories in Table 3: flood risk vulnerability and flood zone compatibility (PPG). A FRA will be required with a planning application. Development should be located sequentially across the site taking account of all sources and levels of flood risk. Mitigation, resilience and a full surface water strategy will be required. The site is allocated for housing, subject to wider sustainability benefits, appropriate mitigation to ensure that the development is safe and measures to reduce flood risk, the development, on balance, is likely to pass an Exception Test.

The site has planning permission.

A small proportion of the site is at higher flood risk. The site is extensive and development can be located and designed sequentially around the areas at higher risk of flooding and full surface water drainage strategy should be included.

Applications should be accompanied by a FRA.