

Monitoring the leaning flint wall

1 Wall lean with plumbob

Measured at a point 5.9m from the road end of the wall.
Vertical dropped from a flint near top of wall, at most extreme point
Horizontal distance measured on ground, from nearest part of wall

2 Distance between nails

Measured at a point just to the south of the kitchen door and about 1m above ground. The distance between a nail in the house wall and a nail in the garden wall.

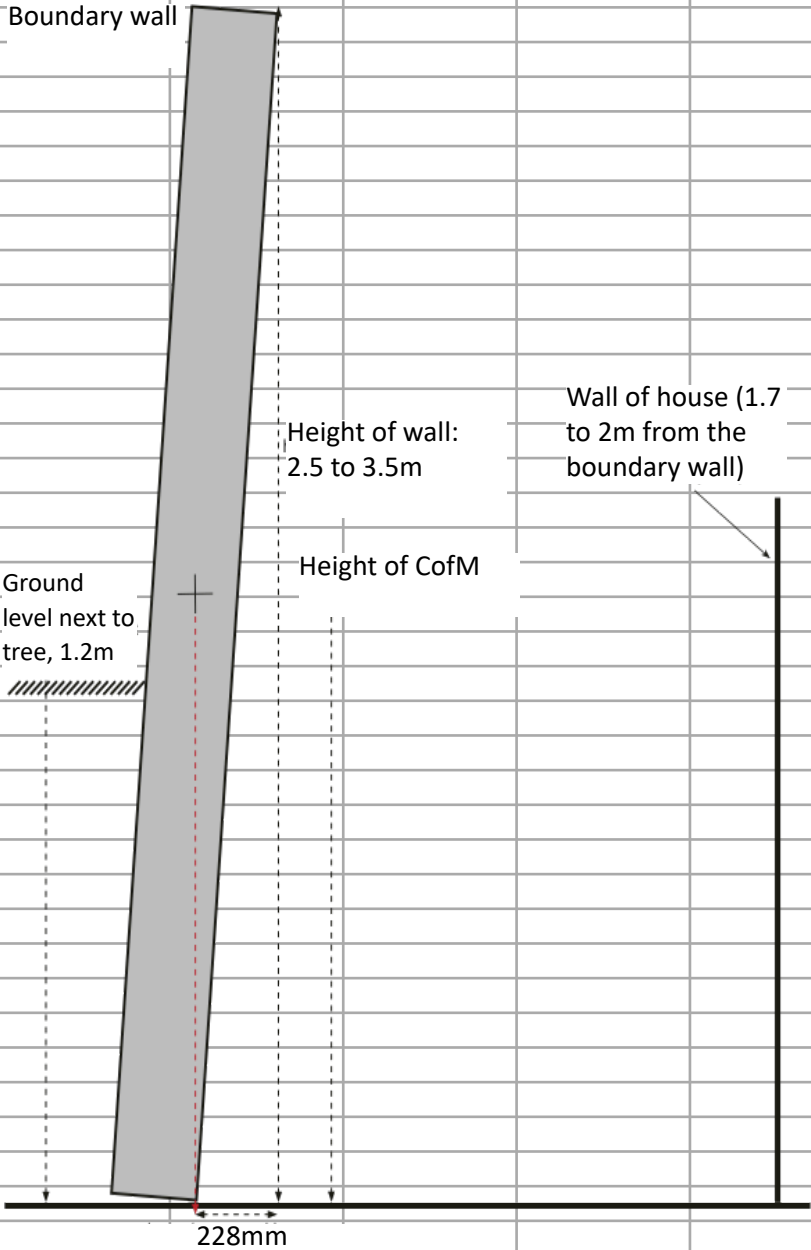
3 Gauge readings

Two micrometer gauges at 2m and 5m from wall end and at hts of 2m and 1.5m respectively.

4 Diagram

The wall is currently leaning by about 228mm (Jan 2022), and this means that the CofM of the wall is now over the edge of the base of the wall.

Date measured	Distance to wall base (mm)	Angle of lean	wall height 2.5to3.5m	Dist between		N gauge reads		S gauge reads	
			wall width 220mm	nails (mm) North pair	nails (mm) South pair	Vert	Horiz	Vert	Horiz
26-Jun-2016	196	5.01	ht of ref 2230 mm	1960		0.00	0.00	0.00	0.00
30-Aug-2016	200	5.11	ht along wall 2245 mm			0.00	0.05	0.00	0.05
22-Apr-2019	210	5.37	dist from wall 0 mm			0.00	0.10	0.00	0.10
4-May-2019	208	5.32	angle of lean 0.000 rad			0.00	0.20	0.00	0.20
20-May-2019	211	5.39	angle of lean 0.00 deg			0.00	0.30	0.00	0.30
3-Jun-2019	208	5.32				0.00	0.20	0.00	0.25
1-Jul-2019	208	5.32				0.00	0.30	0.00	0.30
1-Aug-2019	212	5.42				0.00	0.30	0.00	0.25
3-Sep-2019	213	5.44				0.00	0.25	0.00	0.20
1-Oct-2019	215	5.50				0.00	0.10	0.00	0.20
1-Nov-2019	215	5.50		1952		0.00	0.20	0.00	0.15
1-Dec-2019	217	5.55				0.00	0.30	0.00	0.15
1-Jan-2020	220	5.62				0.00	0.20	0.00	0.10
1-Feb-2020	220	5.62				0.00	0.30	0.00	0.10
1-Mar-2020	217	5.55				0.00	0.20	0.00	0.15
1-Apr-2020	218	5.57				0.00	0.25	0.00	0.20
1-May-2020	220	5.62				0.00	0.10	0.00	0.10
1-Jun-2020	218	5.57				0.00	0.10	0.00	0.10
1-Jul-2020	217	5.55				0.00	0.30	0.00	0.10
1-Aug-2020	217	5.55				0.00	0.20	0.00	0.10
1-Sep-2020	220	5.62		1953	1657	0.00	0.20	0.00	0.15
1-Oct-2020	218	5.57		1950		0.00	0.20	0.00	0.15
1-Nov-2020	220	5.62		1955		0.00	0.25	0.00	0.20
1-Dec-2020	220	5.62		1950		0.00	0.25	0.00	0.35
1-Jan-2021	224	5.73		1952		0.00	0.30	0.00	0.40
1-Feb-2021	220	5.62		1950		0.00	0.35	0.00	0.40
1-Mar-2021	227	5.80		1950		0.00	0.30	0.00	0.35
1-Apr-2021	223	5.70		1952		0.00	0.25	0.00	0.35
1-May-2021	225	5.75		1950		0.00	0.30	0.00	0.30
1-Jun-2021	224	5.73		1951		0.00	0.10	0.00	0.10
1-Jul-2021	225	5.75		1948	1658	0.00	0.10	0.00	0.15
1-Aug-2021	225	5.75		1947		0.00	0.15	0.00	0.15
1-Sep-2021	226	5.78		1950		0.00	0.15	0.00	0.15
1-Oct-2021	230	5.88		1960		0.00	0.20	0.00	0.20
1-Nov-2021	228	5.83		1955		0.00	0.15	0.00	0.20
1-Dec-2021	226	5.78		1952		0.00	0.15	0.00	0.25
1-Jan-2022	228	5.83		1951		0.00	0.20	0.00	0.30
1-Feb-2022	228	5.83		1945		0.00	0.20	0.00	0.30
1-Mar-2022	228	5.83							
1-Apr-2022									



Angle measurements

Position along wall	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Angle of lean	0.3	0.7	0.8	2.7	4.3	5.9	6.1	7.0	7.1	7.8	8.1	7.9	7.5	7.0	6.2	4.8	4.7	3.5	3.4	3.2	3.1	2.5	2.0	1.5
Note: position is measured in metres from road end of wall																								

Soil height measurements

Position along wall	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Ht in no. 78 garden	200	190	180	143	143	170	186	210	240	240	305	300	290	280	295	285	295	280	280	280	280	280	280	280
Ht in no. 76 garden	270	270	270	270	270	264	262	262	266	277	310	310	300	300	300	300	300	295	295	295	295	295	295	295
Difference	70	80	90	127	127	94	76	52	26	37	5	10	10	20	5	15	5	20	15	15	15	15	15	15
Note: position is measured in metres from road end of wall																								