



Durrington
Bridge
House,
Barrington
Road,
Worthing,
BN12 4SE

Internal Daylight and Sunlight Report

November
2024



Ref: 24-13490

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1. Executive Summary

This report has been prepared to demonstrate the levels of daylight seen within the proposed residential units within the redevelopment at **Durrington Bridge House, Barrington Road, Worthing, BN12 4SE**.

The report assesses the internal daylight and sunlight within the proposed accommodation. The assessment is undertaken in accordance with **"BRE 209 Digest: Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice"**.

The following can be concluded based on the studies undertaken:

- **Internal daylight:** All habitable rooms have been assessed for daylight. This has shown that all rooms assessed will meet or surpass the level of daylight recommended by the BRE. Therefore, it can be concluded that the proposed accommodation performs extremely well.
- **Internal sunlight:** All south facing living rooms have been assessed for sunlight access. This has shown that the majority (60 of the 68 eligible rooms) will surpass the recommended number of hours as set out in the BR209 guidance. With the rooms falling short again at lower levels within the courtyard, which is to be expected.

Therefore, it can be concluded that the proposed accommodation performs well in terms of daylight and sunlight.

2. Introduction

This report has been prepared to demonstrate the levels of daylight seen within the proposed residential units within the redevelopment at **Durrington Bridge House, Barrington Road, Worthing, BN12 4SE**.

The report assesses the internal daylight and sunlight within the proposed habitable rooms. The assessment is undertaken in accordance with **"BRE 209 Digest: Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice"**.

The proposed drawings (in dwg format) of the project were provided by **Brooks Murray** in **October 2024** and have been used in preparing this report.

3. Assessment Methodology

This study is based on guidelines set out in the *BRE Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice, 2022*. The assessment has been conducted using Radiance software through MBS Autocad. A 3D model has been built based on the latest architectural drawings.

The simulations assess the Annual Illuminance Target (ET), DA and sDA. Key points of the simulation include:

- Tested on a horizontal plane at 0.85 m above the floor
- Grid size of 0.25m
- Margin of 0.30m from the internal walls
- Glass surface maintenance factor of 0.95
- Hourly weather file for a whole year from London Heathrow TRY2016
- Windows frames based on drawings received

Surface reflectances

Surface	Reflectance Value
Internal Walls	0.5
Ceilings	0.7
Floors	0.2
External walls and obstructions	0.2
Exterior ground	0.2

Internal Daylight Assessment

British Standard “Daylight in buildings” (BS EN 17037)

The British Standard “Daylight in buildings” (BS EN 17037) contains advice and guidance on interior daylighting. The guidance contained in the BRE publication (BR 209, 2022) is intended to be used with BS EN 17037 and its UK National Annex.

BS EN 17037 supersedes BS 8206 Part 2 “Code of practice for daylighting”[C2], which contained a method of assessment based on Average Daylight Factor, which is now no longer recommended. For daylight provision in buildings, BS EN 17037 provides a methodology based on target illuminances from daylight to be achieved over specified fractions of the reference plane for at least half of the daylight hours in a typical year.

BS EN 17037 gives three levels of recommendation for daylight provision in interior spaces: minimum, medium and high. For compliance with the standard, a daylight space should achieve the minimum level of recommendation.

The National Annex A of BS EN 17037 also gives minimum values for housing, in living rooms, kitchens, and bedrooms. Achieving higher daylight factor values will give improved daylight provision. This would be particularly appropriate in housing for the elderly because they require more light and are more likely to be at home during the day.

However, interiors with very high daylight levels (for example where a daylight illuminance of 500 lux is exceeded over half the room for more than half of the daylight hours) sometimes have problems with summertime overheating or excessive heat loss in winter.

Annual Daylight Metrics

The annual daylight method involves using climatic data for the location of the site (via the use of an appropriate, typical or average year, weather file) to calculate the illuminance from daylight at each point on an assessment grid on the reference plane at an at least hourly interval for a typical year.

A target illuminance (ET) is the illuminance from daylight that should be achieved for at least half of annual daylight hours across a specified fraction of the reference plane in a daylight space.

Daylight Autonomy (DA) is the percentage of occupied hours that each sensor receives more than the illuminance threshold, and Spatial Daylight Autonomy (sDA) is an annual daylighting metric that quantifies the fraction of the area within a space for which the daylight autonomy exceeds a specified value.

Specific recommendations for daylight provision in UK dwellings

The UK National Annex gives specific minimum recommendations for habitable rooms in dwellings in the United Kingdom. These are intended for 'hard to light' dwellings, for example in basements or with significant external obstructions or with tall trees outside, or for existing buildings being refurbished or converted into dwellings. The National Annex, therefore, provides the UK guidance on minimum daylight provision in all UK dwellings.

The UK National Annex gives illuminance recommendations of:

- 100 lux in bedrooms,
- 150 lux in living rooms and
- 200 lux in kitchens.

These are the median illuminances, to be exceeded over at least 50% of the assessment points in the room for at least half of the daylight hours.

Annual Sunlight Metrics

In terms of Sunlight the BRE states that it is generally more important for residential properties.

Within section 3.1 of it states *"in housing, the main requirement for sunlight is in living rooms, where it is valued at any time of the day, but especially in the afternoon. Sunlight is also required in conservatories. It is viewed as less important in bedrooms and in kitchens where people prefer it in the morning rather than the afternoon."*

The guide suggests that designers minimise the number of units/dwellings with living areas windows facing solely north. This is unless there are other factors steering the design such as views and privacy.

The BRE refers to the BS EN 17037 criterion to establish sunlight targets for dwellings. It states that each dwelling should have at least one habitable room receiving 1.5 hours of exposure on the 21st March. There are also medium and high sunlight targets (3 and 4 hours respectively). That being said it must be taken flexibly when considering the sites existing environment, as it may have constraints that determine the orientation of the proposed.

This is tested by taking the centre point of the inner surface of the window and assesses the amount of sunlight hours it would receive on the 21st of March.

Below is a summary of section 3.1 of the guidance:

“In general, a dwelling or non-domestic building which has a particular requirement for sunlight, will appear reasonably sunlit provided that:

- At least one main window faces within 90 degrees of due south, and*
- A habitable room, preferably a main living room, can receive a total of at least 1.5 hours of sunlight on 21 March. This is assessed at the inside centre of the window(s); sunlight received by different windows can be added provided they occur at different times and sunlight hours are not double counted...”*

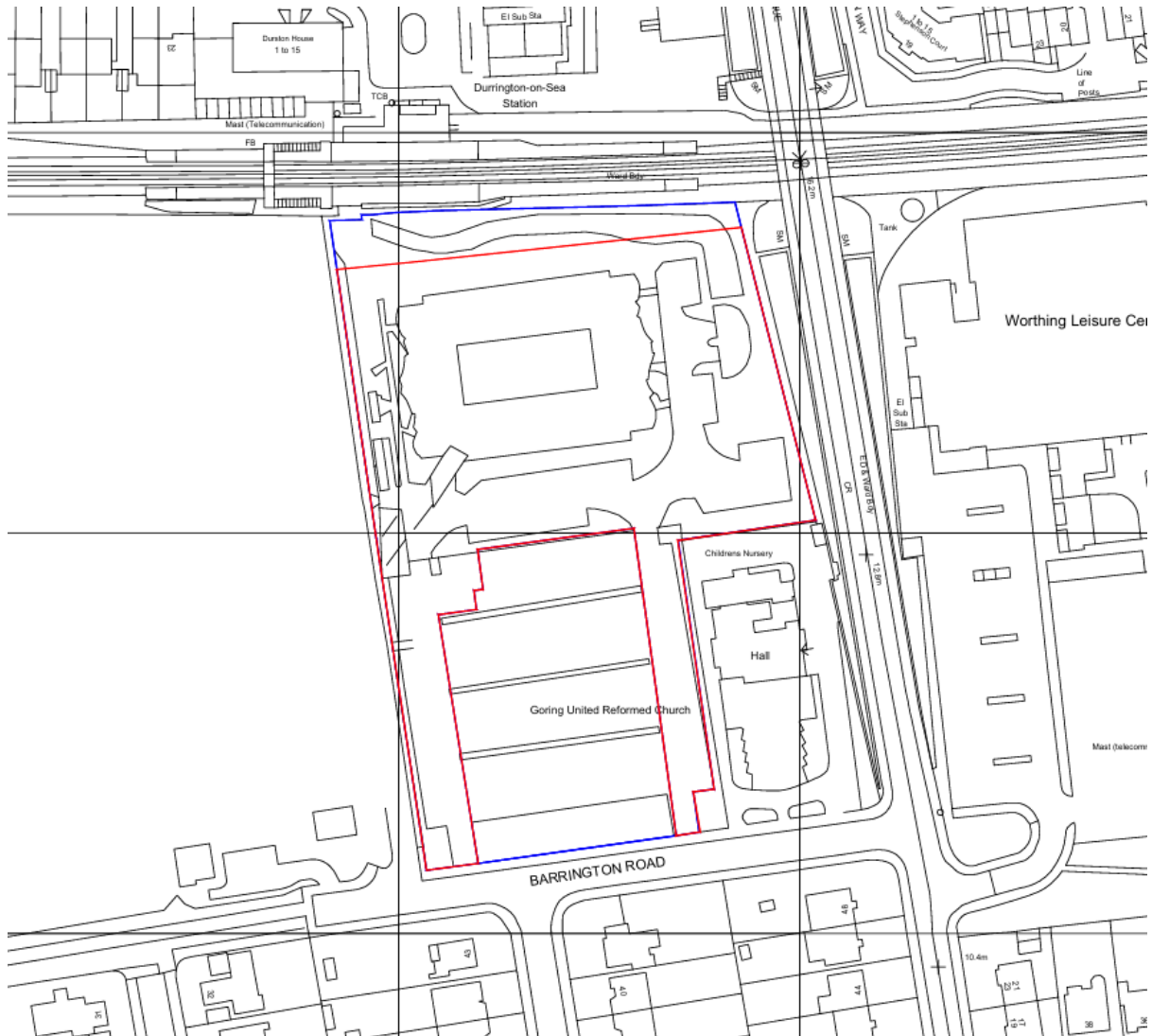


Image 1 – Location plan

4. Results

Annual Daylight Results

The annual daylight method involves using climatic data for the location of the site (via the use of an appropriate, typical or average year, weather file) to calculate the illuminance from daylight at each point on an assessment grid on the reference plane at an at least hourly interval for a typical year.

A target illuminance (ET) is the illuminance from daylight that should be achieved for at least half of annual daylight hours across a specified fraction of the reference plane in a daylight space.

Daylight Autonomy (DA) is the percentage of occupied hours that each sensor receives more than the illuminance threshold, and Spatial Daylight Autonomy (sDA) is an annual daylighting metric that quantifies the fraction of the area within a space for which the daylight autonomy exceeds a specified value.

Internal Daylight Analysis						
Floor	Room No	Room Use	Median Lux	lux sDA Target	SDA Achieved	Compliance
Ground	R1	Living Room	337	150	99%	PASS
	R2	Bedroom	272	100	100%	PASS
	R3	LKD	236	200	63%	PASS
	R4	Bedroom	319	100	100%	PASS
	R5	Bedroom	336	100	100%	PASS
	R6	LKD	239	200	62%	PASS
	R7	LKD	239	200	64%	PASS
	R8	Bedroom	302	100	100%	PASS
	R9	Bedroom	310	100	100%	PASS
	R10	LKD	239	200	62%	PASS
	R11	Bedroom	247	100	100%	PASS
	R12	Bedroom	120	100	58%	PASS
	R13	Bedroom	156	100	68%	PASS
	R14	Living Room	148	150	50%	PASS
	R15	Living Room	153	150	51%	PASS
	R16	Bedroom	181	100	77%	PASS
	R17	Bedroom	130	100	64%	PASS
	R18	Bedroom	401	100	100%	PASS
	R19	Living Room	326	150	98%	PASS
	R20	Living Room	298	150	99%	PASS
	R21	Bedroom	176	100	73%	PASS
	R22	Bedroom	240	100	97%	PASS
	R23	Living Room	361	150	100%	PASS
	R24	LKD	405	200	89%	PASS
	R25	Bedroom	491	100	100%	PASS
	R26	Bedroom	374	100	100%	PASS
	R27	Bedroom	286	100	100%	PASS
	R28	Bedroom	438	100	100%	PASS
	R29	Living Room	374	150	100%	PASS

	R30	LKD	286	200	70%	PASS
	R31	Bedroom	415	100	100%	PASS
	R32	Bedroom	372	100	100%	PASS
	R33	Bedroom	590	100	100%	PASS
	R34	LKD	480	200	98%	PASS
	R35	Living Room	261	150	83%	PASS
	R36	Bedroom	258	100	87%	PASS
	R37	Bedroom	276	100	94%	PASS
	R38	Living Room	277	150	80%	PASS
First	R1	LKD	561	200	100%	PASS
	R2	Bedroom	402	100	100%	PASS
	R3	LKD	397	200	100%	PASS
	R4	Bedroom	421	100	100%	PASS
	R5	Bedroom	435	100	100%	PASS
	R6	LKD	395	200	100%	PASS
	R7	LKD	401	200	100%	PASS
	R8	Bedroom	410	100	100%	PASS
	R9	Bedroom	415	100	100%	PASS
	R10	LKD	388	200	100%	PASS
	R11	Bedroom	355	100	100%	PASS
	R12	Bedroom	368	100	100%	PASS
	R13	Living Room	430	150	99%	PASS
	R14	Living Room	591	150	100%	PASS
	R15	Bedroom	503	100	100%	PASS
	R16	Bedroom	499	100	100%	PASS
	R17	Living Room	554	150	100%	PASS
	R18	Living Room	321	150	100%	PASS
	R19	Bedroom	333	100	100%	PASS
	R20	Bedroom	455	100	100%	PASS
	R21	Bedroom	456	100	100%	PASS
	R22	Living Room	435	150	100%	PASS
	R23	Bedsit	440	200	98%	PASS
	R24	Bedroom	426	100	100%	PASS
	R25	Bedroom	413	100	100%	PASS
	R26	Living Room	517	150	100%	PASS
	R27	Living Room	373	150	99%	PASS
	R28	Bedroom	316	100	100%	PASS
	R29	Living Room	465	150	100%	PASS
	R30	Bedroom	497	100	100%	PASS
	R31	Bedroom	474	100	100%	PASS
	R32	Bedroom	464	100	100%	PASS
	R33	LKD	464	200	100%	PASS
	R34	Living Room	427	150	100%	PASS
	R35	Bedroom	286	100	100%	PASS

	R36	Bedroom	389	100	100%	PASS
	R37	Living Room	456	150	100%	PASS
	R38	LKD	605	200	100%	PASS
	R39	Bedroom	609	100	100%	PASS
	R40	Bedroom	524	100	100%	PASS
	R41	Bedroom	452	100	100%	PASS
	R42	Bedroom	689	100	100%	PASS
	R43	LKD	392	200	100%	PASS
	R44	LKD	536	200	100%	PASS
	R45	Bedroom	563	100	100%	PASS
	R46	Bedroom	545	100	100%	PASS
	R47	Bedroom	560	100	100%	PASS
	R48	Bedroom	641	100	100%	PASS
	R49	LKD	508	200	100%	PASS
	R50	Bedroom	570	100	100%	PASS
	R51	Bedroom	650	100	100%	PASS
	R52	LKD	633	200	100%	PASS
	R53	Living Room	469	150	99%	PASS
	R54	Bedroom	455	100	100%	PASS
	R55	Bedroom	440	100	100%	PASS
	R56	Living Room	515	150	100%	PASS
Second	R1	LKD	547	200	100%	PASS
	R2	Bedroom	424	100	100%	PASS
	R3	LKD	395	200	100%	PASS
	R4	Bedroom	458	100	100%	PASS
	R5	Bedroom	461	100	100%	PASS
	R6	LKD	402	200	100%	PASS
	R7	LKD	399	200	100%	PASS
	R8	Bedroom	440	100	100%	PASS
	R9	Bedroom	444	100	100%	PASS
	R10	LKD	392	200	100%	PASS
	R11	Bedroom	371	100	100%	PASS
	R12	Bedroom	625	100	100%	PASS
	R13	Living Room	539	150	100%	PASS
	R14	Living Room	757	150	100%	PASS
	R15	Bedroom	758	100	100%	PASS
	R16	Bedroom	751	100	100%	PASS
	R17	Living Room	706	150	100%	PASS
	R18	Living Room	390	150	100%	PASS
	R19	LKD	530	200	100%	PASS
	R20	Bedroom	562	100	100%	PASS
	R21	Bedroom	581	100	100%	PASS
	R22	LKD	526	200	100%	PASS
	R23	Bedsit	494	200	99%	PASS

	R24	Bedroom	526	100	100%	PASS
	R25	Bedroom	526	100	100%	PASS
	R26	Living Room	654	150	100%	PASS
	R27	Living Room	452	150	100%	PASS
	R28	Bedroom	455	100	100%	PASS
	R29	Living Room	562	150	100%	PASS
	R30	Bedroom	670	100	100%	PASS
	R31	Bedroom	608	100	100%	PASS
	R32	Bedroom	511	100	100%	PASS
	R33	LKD	436	200	95%	PASS
	R34	Living Room	455	150	100%	PASS
	R35	Bedroom	278	100	100%	PASS
	R36	Bedroom	381	100	100%	PASS
	R37	Living Room	474	150	99%	PASS
	R38	LKD	566	200	100%	PASS
	R39	Bedroom	661	100	100%	PASS
	R40	Bedroom	542	100	100%	PASS
	R41	Bedroom	536	100	100%	PASS
	R42	Bedroom	726	100	100%	PASS
	R43	LKD	366	200	98%	PASS
	R44	LKD	511	200	100%	PASS
	R45	Bedroom	596	100	100%	PASS
	R46	Bedroom	578	100	100%	PASS
	R47	Bedroom	532	100	100%	PASS
	R48	Bedroom	581	100	100%	PASS
	R49	LKD	467	200	100%	PASS
	R50	Bedroom	491	100	95%	PASS
	R51	Bedroom	699	100	100%	PASS
	R52	LKD	596	200	100%	PASS
	R53	Living Room	495	150	97%	PASS
	R54	Bedroom	507	100	100%	PASS
	R55	Bedroom	464	100	100%	PASS
	R56	Living Room	541	150	97%	PASS
Third	R1	LKD	340	200	100%	PASS
	R2	Bedroom	288	100	100%	PASS
	R3	LKD	246	200	66%	PASS
	R4	Bedroom	334	100	100%	PASS
	R5	Bedroom	345	100	100%	PASS
	R6	LKD	247	200	63%	PASS
	R7	LKD	245	200	65%	PASS
	R8	Bedroom	305	100	100%	PASS
	R9	Bedroom	319	100	100%	PASS
	R10	LKD	240	200	63%	PASS
	R11	Bedroom	249	100	100%	PASS

R12	Bedroom	513	100	100%	PASS
R13	Living Room	314	150	98%	PASS
R14	Living Room	506	150	100%	PASS
R15	Bedroom	564	100	100%	PASS
R16	Bedroom	569	100	100%	PASS
R17	Living Room	474	150	100%	PASS
R18	Living Room	230	150	93%	PASS
R19	Bedroom	404	100	100%	PASS
R20	Bedroom	356	100	100%	PASS
R21	Bedroom	348	100	100%	PASS
R22	Living Room	361	150	100%	PASS
R23	Bedsit	334	200	97%	PASS
R24	Bedroom	315	100	100%	PASS
R25	Bedroom	319	100	100%	PASS
R26	Living Room	408	150	100%	PASS
R27	Living Room	259	150	98%	PASS
R28	Bedroom	331	100	100%	PASS
R29	Living Room	386	150	100%	PASS
R30	Bedroom	446	100	100%	PASS
R31	Bedroom	388	100	100%	PASS
R32	Bedroom	354	100	100%	PASS
R33	LKD	262	200	75%	PASS
R34	Living Room	324	150	100%	PASS
R35	Bedroom	195	100	100%	PASS
R36	Bedroom	273	100	100%	PASS
R37	Living Room	331	150	99%	PASS
R38	LKD	336	200	86%	PASS
R39	Bedroom	488	100	100%	PASS
R40	Bedroom	352	100	100%	PASS
R41	Bedroom	356	100	100%	PASS
R42	Bedroom	495	100	100%	PASS
R43	LKD	202	200	51%	PASS
R44	LKD	282	200	73%	PASS
R45	Bedroom	408	100	100%	PASS
R46	Bedroom	365	100	100%	PASS
R47	Bedroom	341	100	100%	PASS
R48	Bedroom	406	100	100%	PASS
R49	LKD	255	200	65%	PASS
R50	Bedroom	315	100	95%	PASS
R51	Bedroom	473	100	100%	PASS
R52	LKD	356	200	94%	PASS
R53	Living Room	379	150	94%	PASS
R54	Bedroom	338	100	95%	PASS
R55	Bedroom	312	100	94%	PASS

Fourth	R56	Living Room	392	150	95%	PASS
	R1	Bedroom	529	100	100%	PASS
	R2	Living Room	419	150	100%	PASS
	R3	Living Room	612	150	100%	PASS
	R4	Bedroom	573	100	100%	PASS
	R5	Bedroom	614	100	100%	PASS
	R6	Living Room	578	150	100%	PASS
	R7	Living Room	325	150	99%	PASS
	R8	Bedroom	455	100	100%	PASS
	R9	Bedroom	389	100	100%	PASS
	R10	Bedroom	365	100	100%	PASS
	R11	Living Room	342	150	100%	PASS
	R12	Bedroom	339	100	100%	PASS
	R13	Bedroom	331	100	100%	PASS
	R14	Living Room	453	150	100%	PASS
	R15	Living Room	298	150	99%	PASS
	R16	Bedroom	324	100	100%	PASS
	R17	Living Room	389	150	100%	PASS
	R18	Bedroom	381	100	100%	PASS
	R19	Bedroom	408	100	100%	PASS
	R20	Living Room	242	150	97%	PASS
	R21	Bedroom	147	100	81%	PASS
	R22	Bedroom	213	100	95%	PASS
	R23	Living Room	261	150	95%	PASS
	R24	Living Room	365	150	93%	PASS
	R25	Bedroom	280	100	100%	PASS
	R26	Bedroom	262	100	100%	PASS
	R27	Living Room	354	150	94%	PASS
	R29	Bedsit	368	200	100%	PASS

Table 1 – Internal Daylight Assessment results

As shown in the table above, all rooms assessed will meet or surpass the sDA target set out by the BRE. Therefore, it can be concluded that the proposed accommodation performs very well in terms of daylight.

Sunlight Results

The BRE refers to the BS EN 17037 criterion to establish sunlight targets for dwellings. It states that each dwelling should have at least one habitable room receiving 1.5 hours of exposure on the 21st March. There are also medium and high sunlight targets (3 and 4 hours respectively). That being said it must be taken flexibly when considering the sites existing environment, as it may have constraints that determine the orientation of the proposed.

Sunlight Assessment					
Floor Ref	Room No.	Room Use	Window Orientation	no. of Hours	Result
Ground	R1	Living Room	351°N 351°N 261°	0 0 2.1 2.1	Minimum
	R3	LKD	351°N 351°N	0 0 0	N/N
	R6	LKD	351°N 351°N	0 0 0	N/A
	R7	LKD	351°N 351°N	0 0 0	N/A
	R10	LKD	351°N 351°N	0 0 0	N/A
	R14	Living Room	81°N 81°N	0 0 0	N/A
	R15	Living Room	261° 261°	0 0 0	Failed
	R19	Living Room	351°N 81°N	0 0.9 0.9	N/A
	R20	Living Room	107° 76°N	2.3 2.1 2.3	Minimum
	R23	Living Room	99° 83°N 55°N	2.5 2.8 0.3 2.8	Minimum
	R24	LKD	81°N	1	High

			171°	5.6 6.6	
	R29	Living Room	171° 171°	4.1 7 7	High
	R30	LKD	171° 171°	7 7 7	High
	R34	LKD	171° 171°	7 7 7	High
	R35	Living Room	265° 245°	2.2 3.9 3.9	Medium
	R38	Living Room	276°N 259°	2.6 3.6 3.6	Medium
First	R1	LKD	351°N 351°N 257°	0	Medium
				0	
				3.8	
				3.8	
	R3	LKD	351°N 351°N	0	N/A
				0	
				0	
	R6	LKD	351°N 351°N	0	N/A
				0	
				0	
	R7	LKD	351°N 351°N	0	N/A
				0	
				0	
	R10	LKD	351°N 351°N	0	N/A
				0	
				0	
	R13	Living Room	171°	1.2	Failed
				1.2	
	R14	Living Room	171° 171°	1	Failed
				0.7	
				1	
	R17	Living Room	171° 171°	0	Failed
				0	
				0	
	R18	Living Room	171°	0	Failed
				0	
	R22	Living Room	81°N	0	N/A

		81°N	0	
			0	
R23	Bedsit	351°N	0	
		351°N	0	
		351°N	0	
			0	N/A
R26	Living Room	351°N	0	
		351°N	0	
			0	N/A
R27	Living Room	351°N	0	
			0	N/A
R29	Living Room	261°	0	
		261°	0	
			0	Failed
R33	LKD	351°N	0	
		87°N	2.7	
			2.7	N/A
R34	Living Room	107°	2.3	
		76°N	2.1	
			2.3	Minimum
R37	Living Room	99°	0	
		83°N	2.8	
		55°N	0.3	
			2.8	Minimum
R38	LKD	77°N	2.3	
		171°	5.6	
			7	High
R43	LKD	171°	4.1	
		171°	7	
			7	High
R44	LKD	171°	7	
		171°	7	
			7	High
R49	LKD	171°	7	
		171°	7	
			7	High
R52	LKD	171°	5.6	
		268°	1.9	
			6.9	High
R53	Living Room	265°	3.1	
		245°	3.9	
			3.9	Medium
R56	Living Room	276°N	2.6	
		259°	3.6	Medium

Second	R1	LKD	351°N 351°N 257°	3.6	Medium
				0	
				0	
				3.8	
	R3	LKD	351°N 351°N	3.8	N/A
				0	
				0	
				0	
	R6	LKD	351°N 351°N	0	N/A
				0	
				0	
				0	
	R7	LKD	351°N 351°N	0	N/A
				0	
				0	
				0	
	R10	LKD	351°N 351°N	0	N/A
				0	
				0	
				0	
	R13	Living Room	171°	4.6	High
				4.6	
	R14	Living Room	171° 171°	5.2	High
				5.5	
				5.7	
	R17	Living Room	171° 171°	4.6	High
				4	
				4.6	
	R18	Living Room	171°	3.4	Medium
				3.4	
	R19	LKD	171°	2.7	Minimum
				2.7	
	R22	LKD	81°N 81°N	0	N/A
				0	
				0	
	R23	Bedsit	351°N 351°N 351°N	0	N/A
				0	
				0	
				0	
	R26	Living Room	351°N 351°N	0	N/A
				0	
				0	
	R27	Living Room	351°N	0	N/A
				0	
	R29	Living Room	261° 261°	0	Failed
				0	
				0	

	R33	LKD	351°N 87°N	0	Minimum
				2.7	
				2.7	
	R34	Living Room	107° 76°N	2.3	Minimum
				2.1	
				2.3	
	R37	Living Room	99° 83°N 55°N	0	Minimum
				2.8	
				0.3	
				2.8	
	R38	LKD	77°N 171°	2.3	High
				5.6	
				7	
	R43	LKD	171° 171°	4.1	High
				7	
				7	
	R44	LKD	171° 171°	7	High
				7	
				7	
	R49	LKD	171° 171°	7	High
				7	
				7	
	R52	LKD	171° 268°	5.6	High
				3.1	
				8.1	
	R53	Living Room	265° 245°	3.1	High
				4.1	
				4.1	
	R56	Living Room	276°N 259°	2.6	Medium
				3.6	
				3.6	
Third	R1	LKD	351°N	0	Medium
			351°N	0	
			257°	3.8	
				3.8	
	R3	LKD	351°N 351°N	0	N/A
				0	
				0	
	R6	LKD	351°N 351°N	0	N/A
				0	
				0	
	R7	LKD	351°N 351°N	0	N/A
				0	
				0	

	R10	LKD	351°N	0	N/A
			351°N	0	
				0	
	R13	Living Room	171°	4.8	High
				4.8	
	R14	Living Room	171°	5.5	High
			171°	6.1	
				6.1	
	R17	Living Room	171°	6.2	High
			171°	5.8	
				6.5	
	R18	Living Room	171°	5.3	High
				5.3	
	R22	Living Room	81°N	0	N/A
			81°N	0	
				0	
	R23	Bedsit	351°N	0	N/A
			351°N	0	
			351°N	0	
				0	
	R26	Living Room	351°N	0	N/A
			351°N	0	
				0	
	R27	Living Room	351°N	0	N/A
				0	
	R29	Living Room	261°	0	Failed
			261°	0.3	
				0.3	
	R33	LKD	351°N	0	Minimum
			87°N	2.7	
				2.7	
	R34	Living Room	107°	2.3	Minimum
			76°N	2.1	
				2.3	
	R37	Living Room	99°	0	Minimum
			83°N	2.8	
			55°N	0.3	
				2.8	
	R38	LKD	77°N	2.3	High
			171°	5.6	
				7	
	R43	LKD	171°	4.1	High
			171°	7	
				7	

	R44	LKD	171°	7	High
			171°	7	
				7	
	R49	LKD	171°	7	High
			171°	7	
				7	
	R52	LKD	171°	5.6	High
			268°	3.1	
				8.2	
	R53	Living Room	265°	3.1	Medium
			245°	3.9	
				3.9	
	R56	Living Room	276°N	2.6	Medium
			259°	3.6	
				3.6	
Fourth	R2	Living Room	171°	4.8	High
				4.8	
	R3	Living Room	171°	5.7	High
				6.3	
				6.3	
	R6	Living Room	171°	6.5	High
				6.1	
				6.5	
	R7	Living Room	171°	4.9	High
				4.9	
	R11	Living Room	81°N	2.3	Minimum
				0	
				2.3	
	R14	Living Room	351°N	0	N/A
				0	
				0	
	R15	Living Room	351°N	0	N/A
				0	
	R17	Living Room	261°	0.2	Medium
				3.5	
				3.5	
	R20	Living Room	107°	2.5	Minimum
				2.3	
				2.5	
	R23	Living Room	99°	0	Minimum
				1.9	
				0.6	
				1.9	
	R24	Living Room	265°	2.1	Medium

			245°	3.6	
				3.6	
	R27	Living Room	276°N 259°	2.4 3.3 3.3	Medium

Table 2 – Internal Sunlight Assessment results

Of the 100 rooms containing a living space, only 68 are facing within 90degrees of due south. 60 of these rooms will see levels in line with or above what is recommended by the BRE (1.5 hours of sunlight on the 21st of March). The rooms falling short are located within the courtyard, this is to be expected with a scheme of this type. However, as the levels seen within the units along the outside being so high and the levels at higher floors doing well, it can be concluded that the proposed development will provide adequate sunlight for the future inhabitants.

Note: Rooms with the result N/A are rooms with windows that do not face within due south, therefore are exempt from this analysis.

5. Conclusion

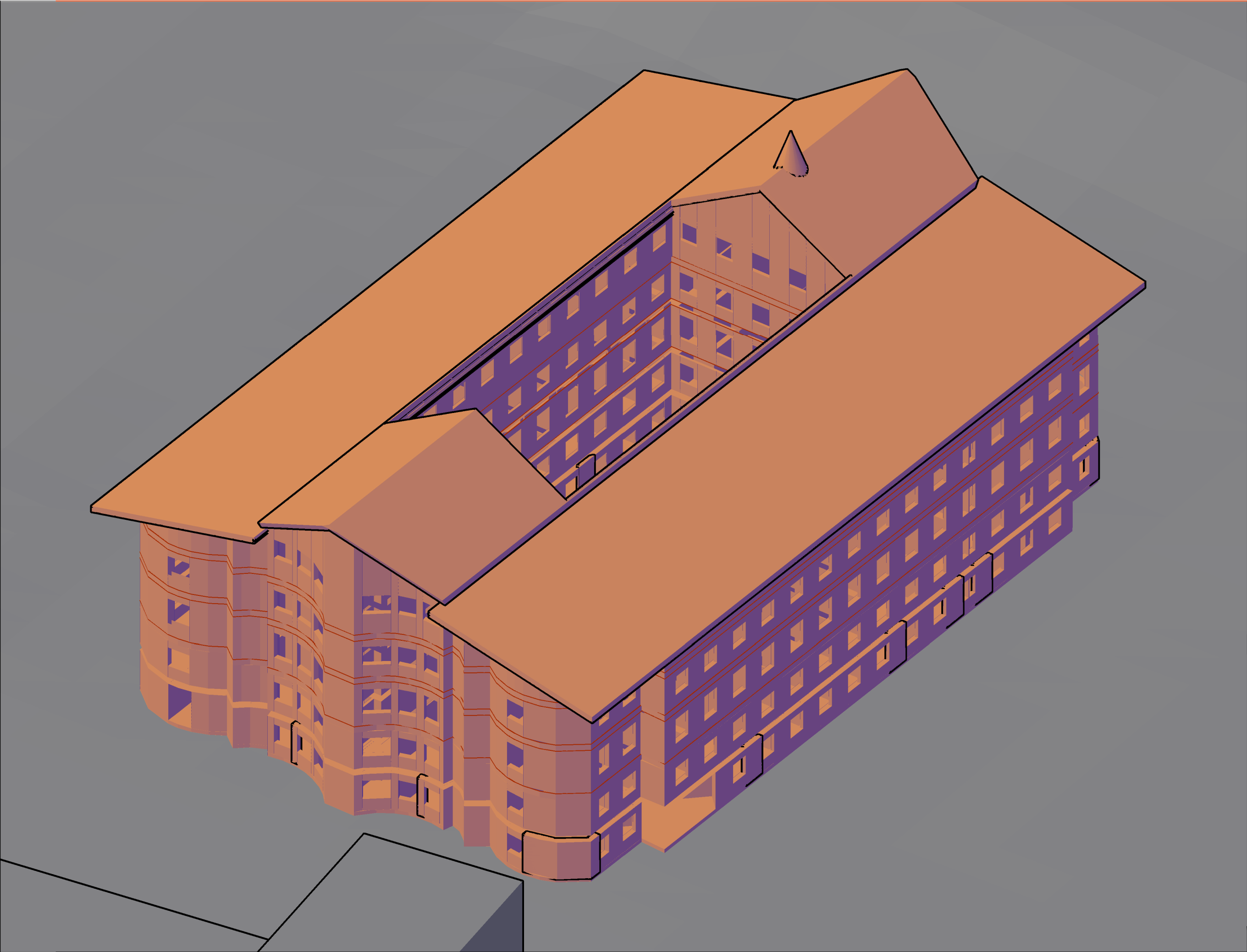
This report has been prepared to demonstrate the levels of daylight seen within the proposed residential units within the redevelopment at **Durrington Bridge House, Barrington Road, Worthing, BN12 4SE**.

The report assesses the internal daylight and sunlight within the proposed accommodation. The assessment is undertaken in accordance with **"BRE 209 Digest: Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice"**.

The following can be concluded based on the studies undertaken:

- **Internal daylight:** All habitable rooms have been assessed for daylight. This has shown that all rooms assessed will meet or surpass the level of daylight recommended by the BRE. Therefore, it can be concluded that the proposed accommodation performs extremely well.
- **Internal sunlight:** All south facing living rooms have been assessed for sunlight access. This has shown that the majority (60 of the 68 eligible rooms) will surpass the recommended number of hours as set out in the BR209 guidance. With the rooms falling short again at lower levels within the courtyard, which is to be expected.

Therefore, it can be concluded that the proposed accommodation performs well in terms of daylight and sunlight.



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P1	HK	MS	24.07.24	First Issue
Rev	Drawn	App'd	Date	Revision Description

Issue
AUGUST 2024

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Client
New Burlington House

Project
24-13490 - Durlington-on-Sea,
Worthing, BN12 4SE

Title
Internal Daylight
Overview

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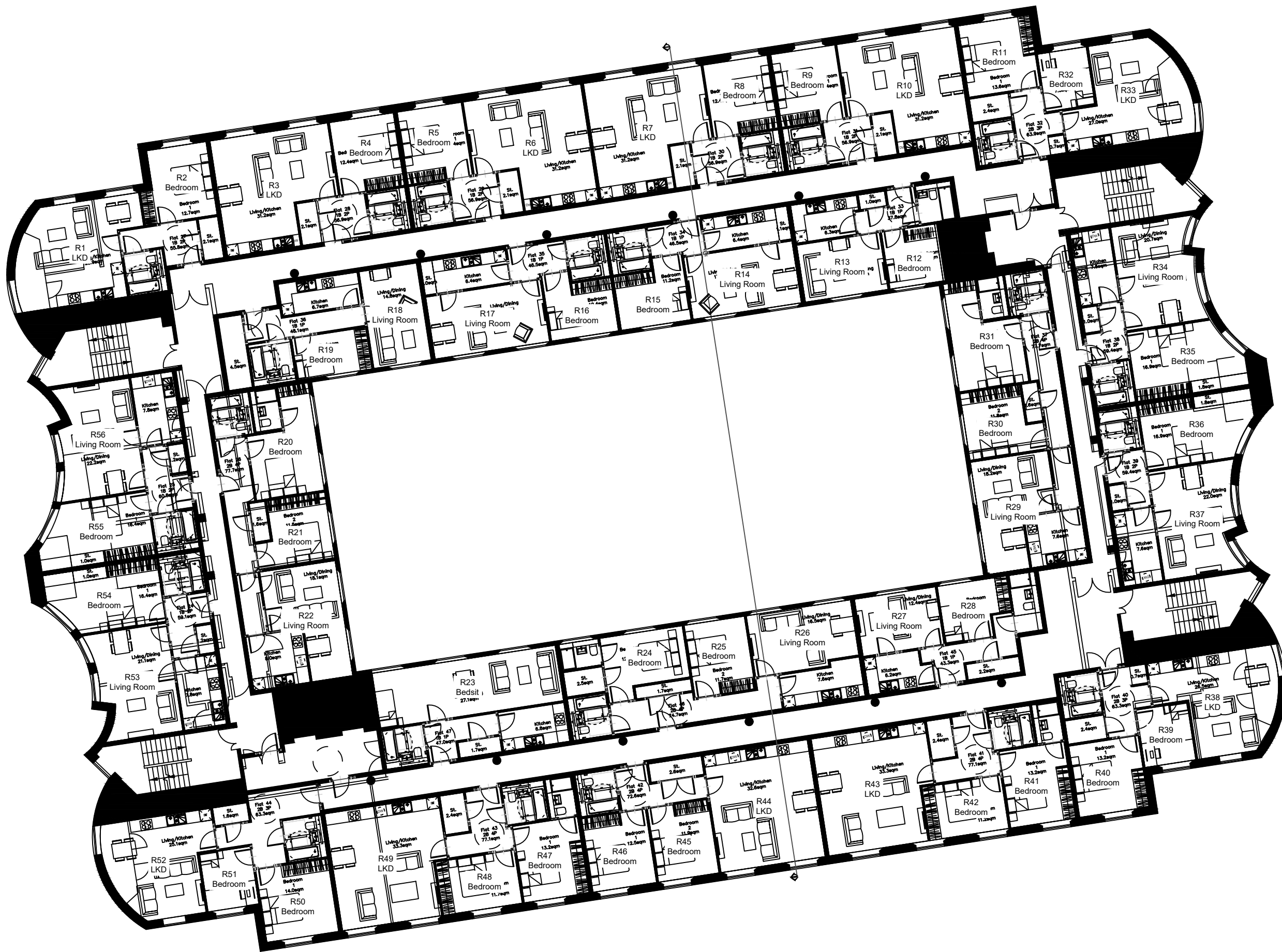
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Client
New Burlington House

Project
24-13490 - Durlington-on-Sea,
Worthing, BN12 4SE

Title
Internal Daylight
Ground Floor

Scale:	Drawn By: HK
Date: October 2024	Checked By: MS
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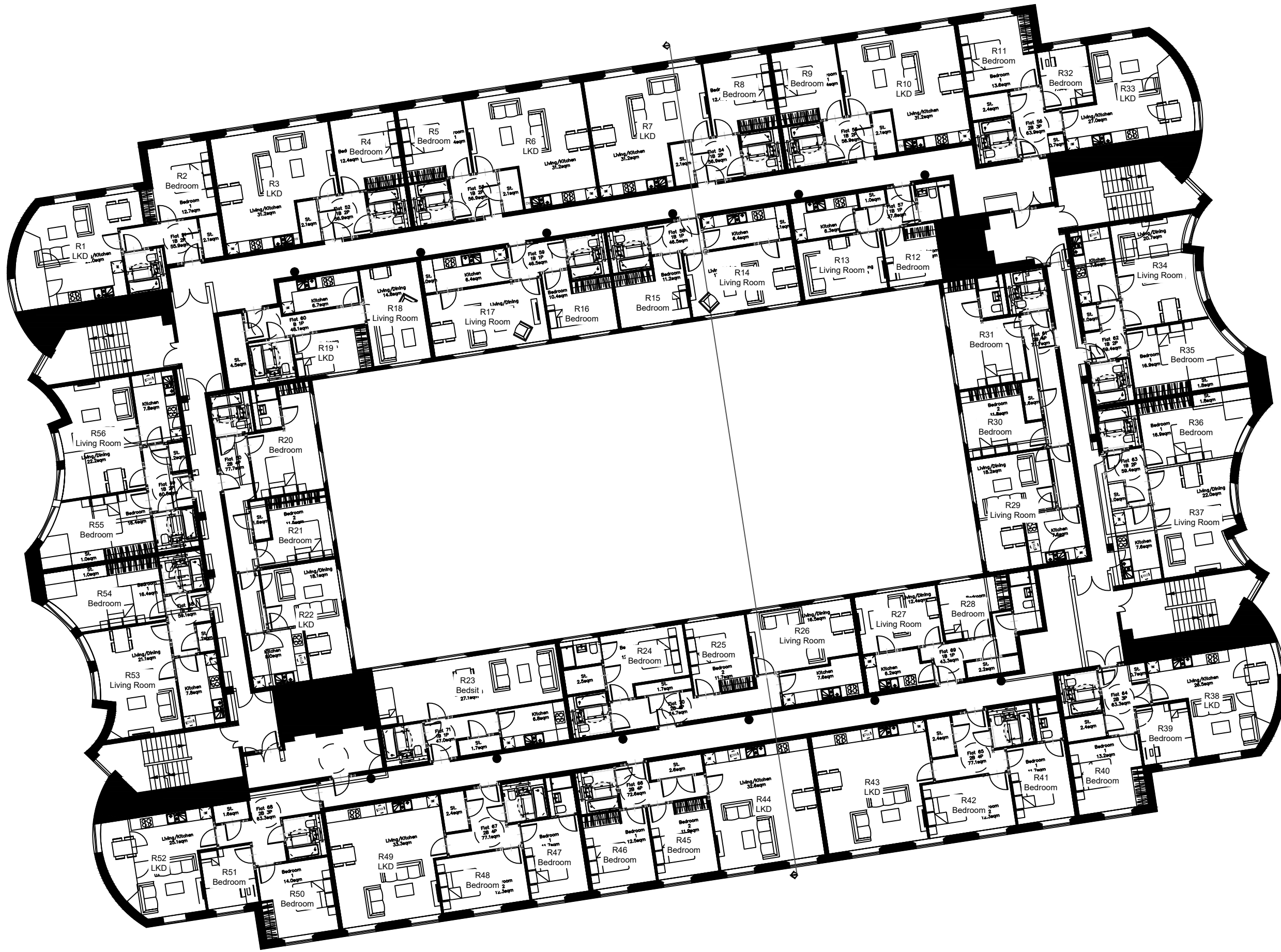
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Client
New Burlington House

Project
**24-13490 - Durington-on-Sea,
Worthing, BN12 4SE**

Title
**Internal Daylight
First Floor**

Scale:	Drawn By: HK
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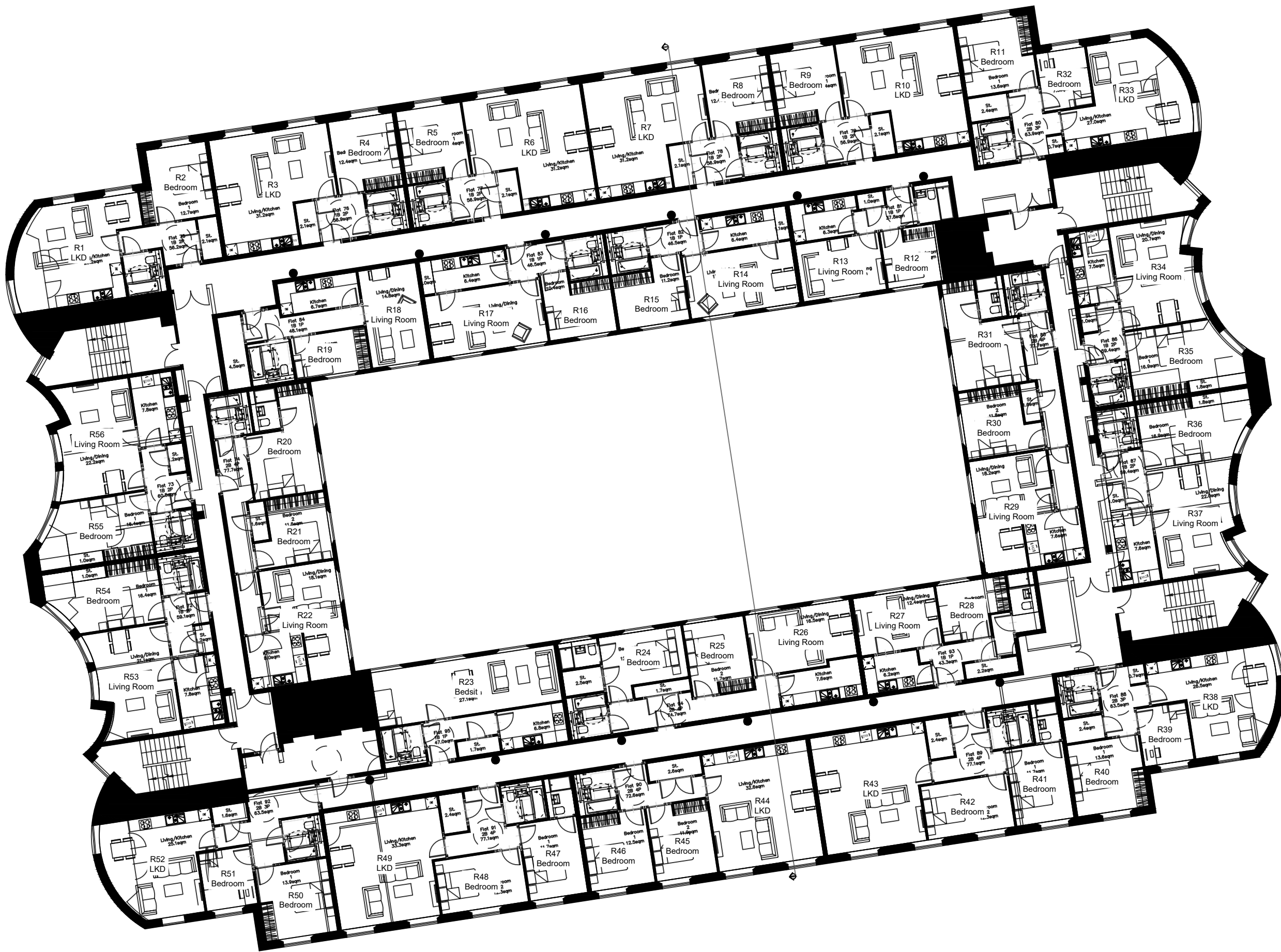
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Project				
24-13490 - Durington-on-Sea, Worthing, BN12 4SE				
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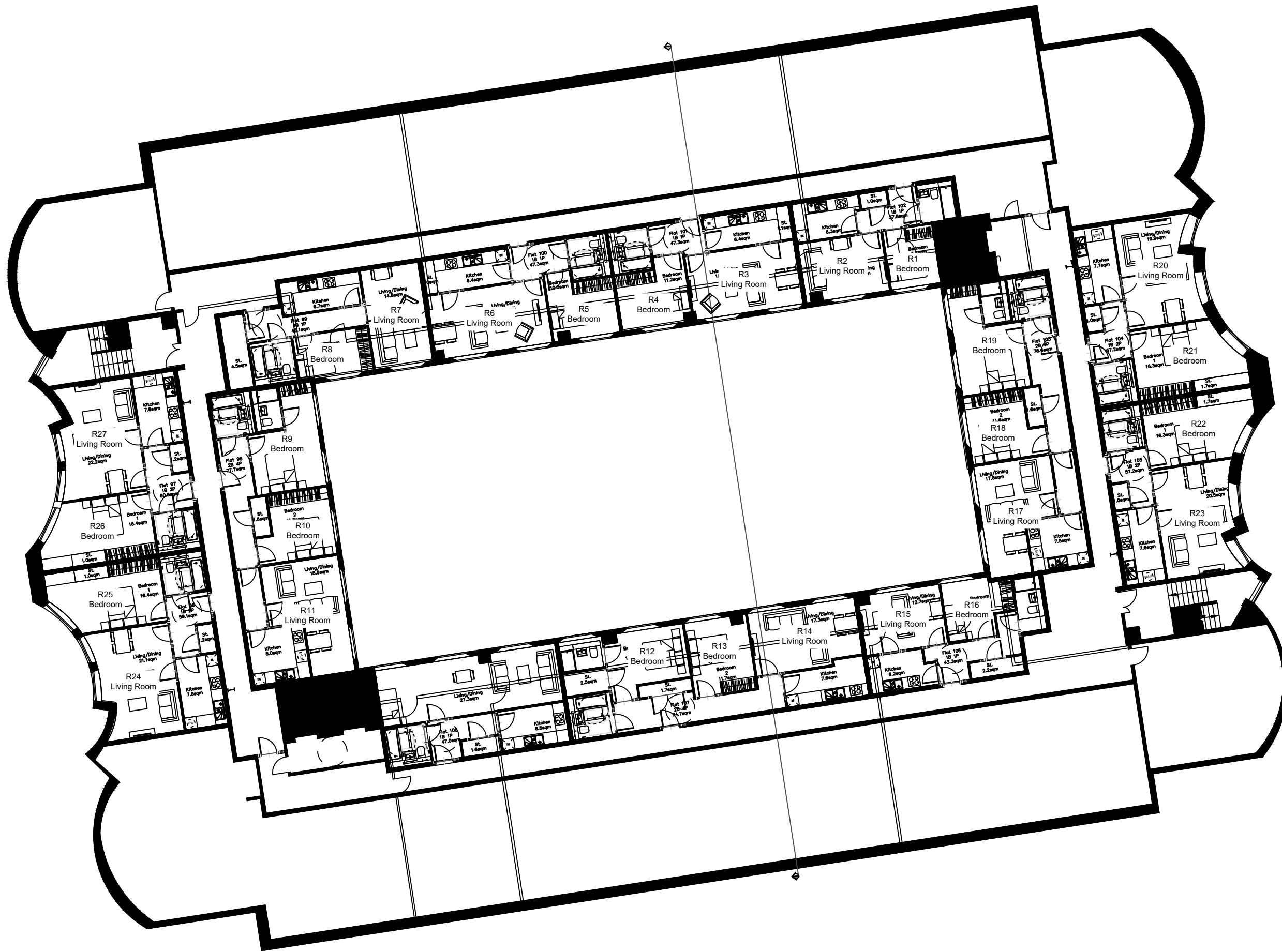
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Client
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Project
**24-13490 - Durington-on-Sea,
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Title
**Internal Daylight
Third Floor**

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Project
24-13490 - Durlington-on-Sea,
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Title
Internal Daylight
Fourth Floor

Scale:	Drawn By: HK
Date: August 2024	Checked By: MS
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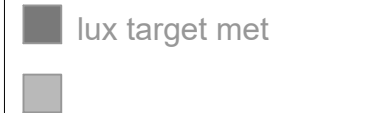
Title
Internal Daylight
Ground Floor

Scale:	Drawn By: HK
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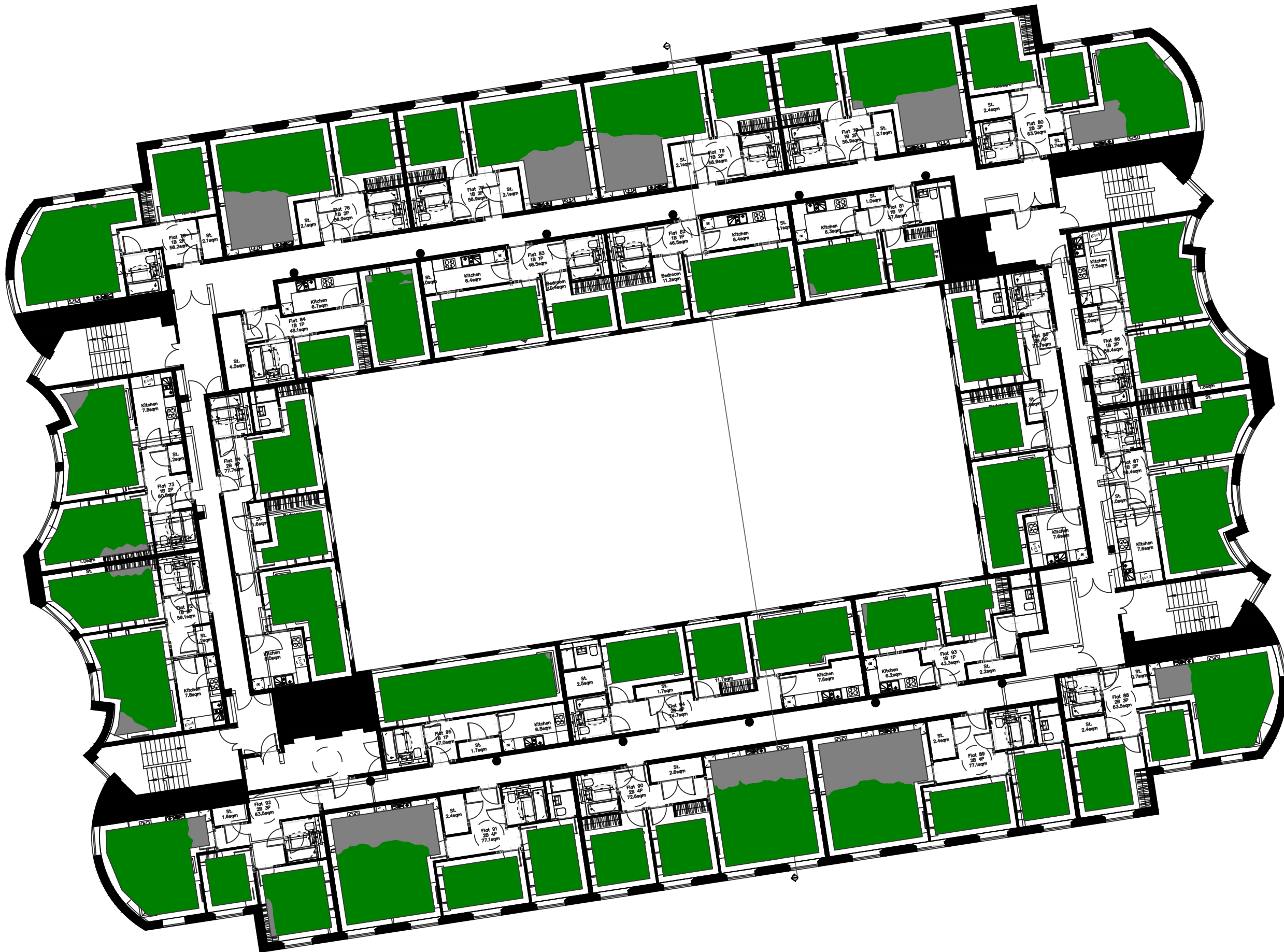
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Client

Project
24-13490 - Durington-on-Sea,
Worthing, BN12 4SE

Title
Internal Daylight
Second Floor

Scale:	Drawn By: HK
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■ lux target met
■ lux target not met

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Third Floor

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