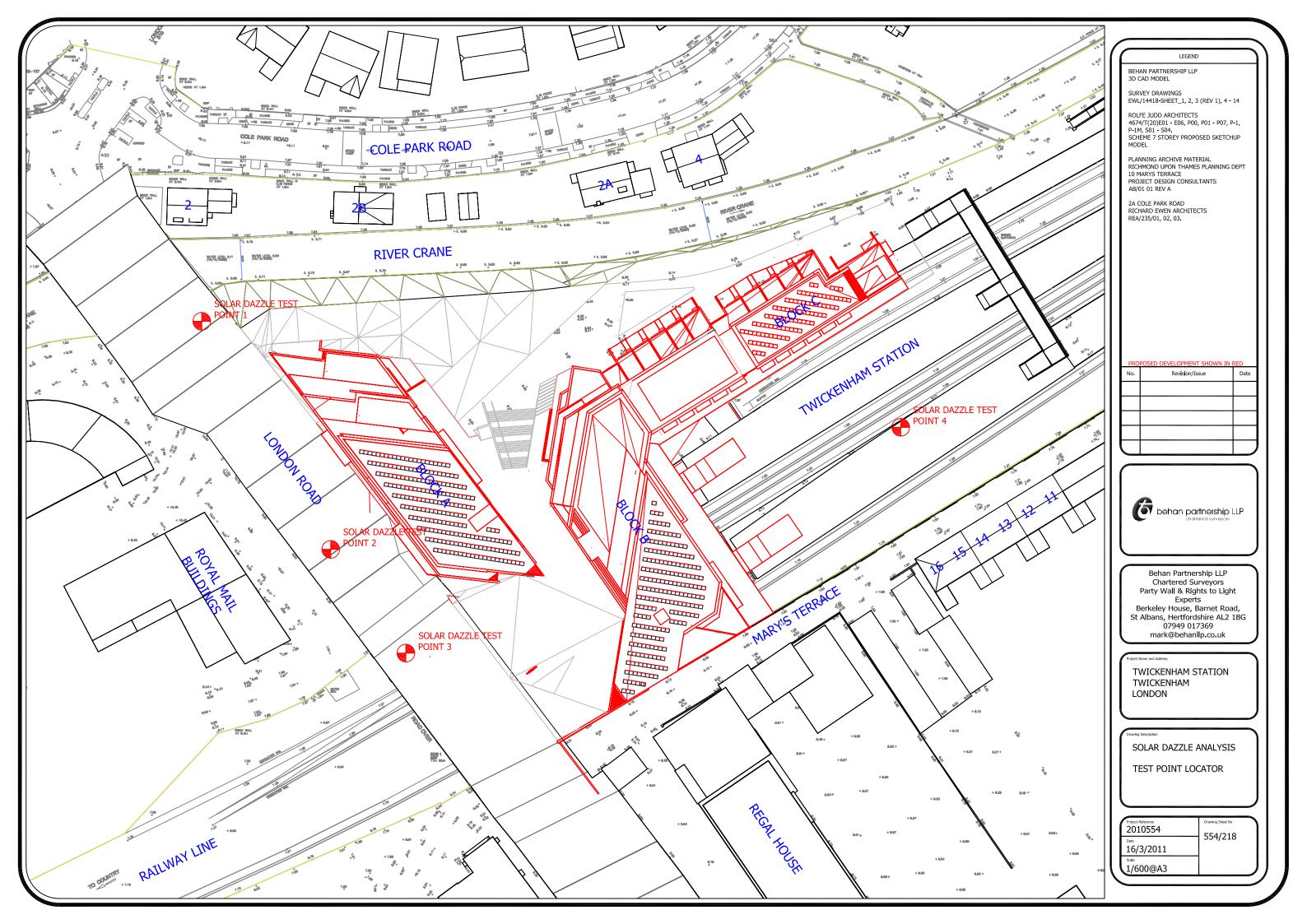
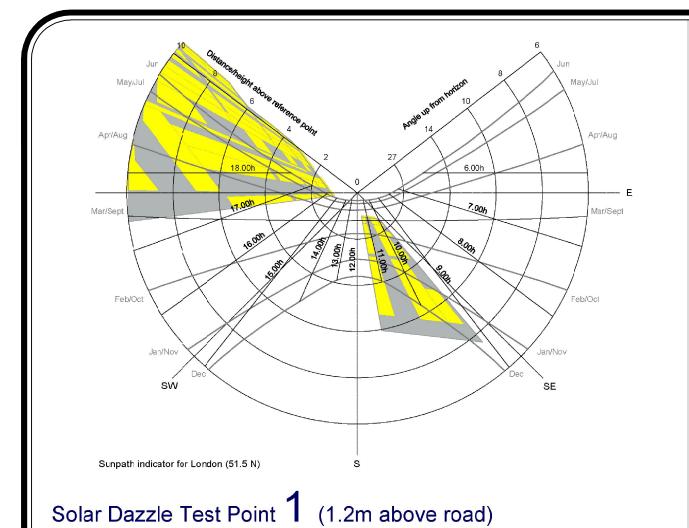
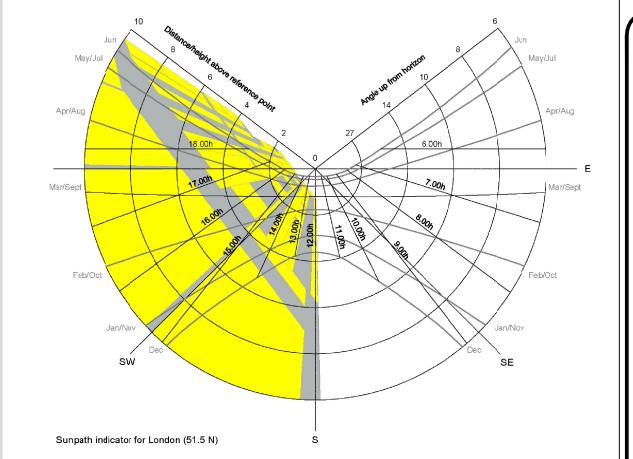
APPENDIX I: DAYLIGHT, SUNLIGHT, OVERSHADOWING AND SOLAR GLARE



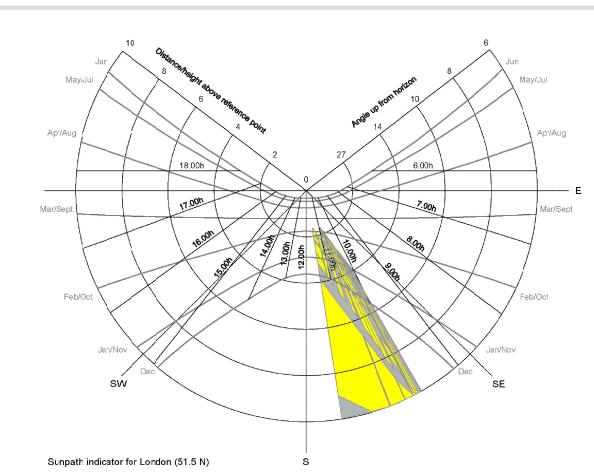
Appendix I-3: Solar Dazzle Analysis



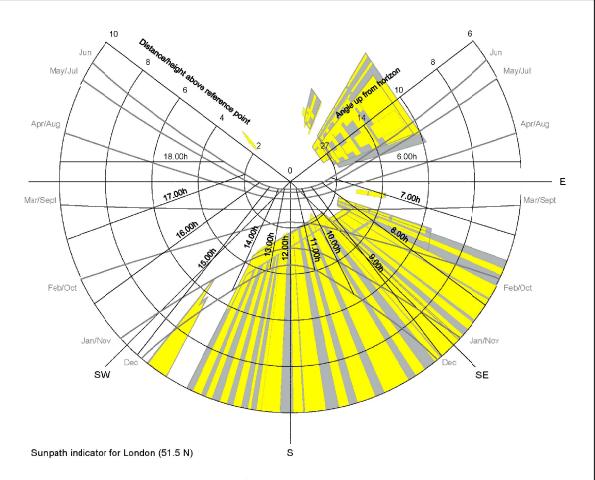




Solar Dazzle Test Point 2 (1.2m above road)



Solar Dazzle Test Point 3 (1.2m above road)



behan partnership LLP Behan Partnership LLP Chartered Surveyors arty Wall & Rights to Light: Berkeley House, Barnet Road, t Albans, Hertfordshire AL2 1BG 07949 017369 mark@behanilp.co.uk TWICKENHAM STATION TWICKENHAM LONDON SOLAR DAZZLE ANALYSIS SUN PATH DIAGRAMS FOR TEST POINTS SHOWING AREAS WHERE SOLAR DAZZLE MAY OCCUR 2010554 16/3/2011

1/600**@**A3

554/219

BEHAN PARTNERSHIP LLP 3D CAD MODEL

ROLFE JUDD ARCHITECTS

PLANNING ARCHIVE MATERIAL RICHMOND UPON THAMES PLANI

2A COLE PARK ROAD RICHARD EWEN ARCHITECTS REA/235/01, 02, 03.

4674/T(20)E01 - E06, P00, P01 - P07, P-1, P-1M, S01 - S04. SCHEME 7 STOREY PROPOSED SKETCHUP MODEL

Solar Dazzle Test Point 4 (1.6m above platform)

APPENDIX I: DAYLIGHT, SUNLIGHT, OVERSHADOWING AND SOLAR GLARE



Appendix I-4: **Daylight Sunlight Results**

DAYLIGHT ANALYSIS TEST ON NEIGHBOURING PROPERTIES

EONDON						
		EXISTING	PROPOSED		%LOSS	PASS/
Room	Window	VSC	VSC	VSC	VSC	FAIL
0.001 E DADY DOAD						
2 COLE PARK ROAD						
Ground Floor	WG/1	28.87	28.87	0.00	0.00	PASS
Room 1	WG/1 WG/2	32.83	31.38	1.45	-4.42	PASS
Room 2	WG/2	27.27	24.70	2.57	-9.42	PASS
	WG/4	30.36	27.83	2.53	-8.33	PASS
Room 3	WG/5	35.87	33.36	2.51	-7.00	PASS
First Floor						
Room 1	W1/1	36.96	35.77	1.19	-3.22	PASS
Room 2	W1/2	37.00	35.42	1.58	-4.27	PASS
Room 3	W1/3	37.72	35.53	2.19	-5.81	PASS
2B COLE PARK ROAD						
Ground Floor Room 1	WG/1	35.43	27.94	7.49	-21.14	PASS
ROOM I	WG/1 WG/2	35.43 35.54	27.42	8.12	-21.14 -22.85	PASS
Room 2	WG/2 WG/3	35.25	32.42	2.83	-8.03	PASS
ROOM 2	WG/3	34.90	32.97	1.93	-5.53	PASS
		01.70	02.77	,0	0.00	17.00
First Floor						
Room 1	W1/1	36.83	30.25	6.58	-17.87	PASS
	W1/2	37.00	29.71	7.29	-19.70	PASS
Room 2	W1/3	38.06	35.55	2.51	-6.59	PASS
Room 3	W1/4	37.95	35.69	2.26	-5.96	PASS
2A COLE PARK ROAD						
<u>Ground Floor</u>	WC/1	22.27	20.21	2.07	0.17	DACC
	WG/1	32.27	29.31 33.19	2.96 3.19	-9.17 9.77	PASS PASS
Living Room	WG/2 WG/3	36.38 35.34	27.22	3.19 8.12	-8.77 -22.98	PASS
	WG/3 WG/4	35.64	27.22	8.04	-22.96 -22.56	PASS
Dining Room	WG/5	35.83	27.73	8.10	-22.61	PASS
-	WG/6	26.91	20.49	6.42	-23.86	FAIL
Kitchen	WG/7	28.47	28.47	0.00	0.00	PASS
First Floor						
	W1/1	37.09	37.09	0.00	0.00	PASS
Bedroom 2	W1/2	37.89	35.24	2.65	-6.99	PASS
	W1/3	37.20	30.41	6.79	-18.25	PASS
Bedroom 1	W1/4	36.15	34.59	1.56	-4.32	PASS
Douroum 1	W1/5	36.13	34.95	1.18	-3.27	PASS
	W1/6	37.31	37.31	0.00	0.00	PASS
0 15						
Second Floor	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	27.00	22.22	4.77	12 (2	DACC
Bedroom 3	W2/1	36.98	32.32	4.66	-12.60	PASS
	W2/2	38.70	37.84	0.86	-2.22	PASS

LONDON						
		EXISTING	PROPOSED		%LOSS	PASS/
Room	Window	VSC	VSC	VSC	VSC	FAIL
-						
4 COLE PARK ROAD						
Ground Floor						
	WG/1	23.75	20.88	2.87	-12.08	PASS
Reception Room	WG/2	28.24	21.31	6.93	-24.54	FAIL
	WG/3	21.66	17.94	3.72	-17.17	PASS
	WG/4	36.04	27.48	8.56	-23.75	PASS
Lindren Deems	WG/5	27.45	25.63	1.82	-6.63	PASS
Living Room	WG/6	32.29	30.93	1.36	-4.21	PASS
	WG/7	19.42	19.42	0.00	0.00	PASS
	WG/8	23.06	18.88	4.18	-18.13	PASS
	WG/9	35.47	30.50	4.97	-14.01	PASS
Room 1	WG/10	36.15	33.92	2.23	-6.17	PASS
Noon 1	WG/11	35.66	31.57	4.09	-11.47	PASS
	WG/11 WG/12	37.77	37.71	0.06	-0.16	PASS
	WG/ 12	37.77	37.71	0.00	-0.10	1 1133
First Floor						
	W1/1	34.11	30.95	3.16	-9.26	PASS
Bedroom 1						
Bedroom 2	W1/2	36.52	33.14	3.38	-9.26	PASS
	W1/3	39.05	38.95	0.10	-0.26	PASS
16 Mary's Terrace						
<u>Ground Floor</u>						
Living Room	WG/1	31.88	28.62	3.26	-10.23	PASS
Living Room	WG/2	32.08	28.79	3.29	-10.26	PASS
First Floor						
Dodroom	W1/1	38.90	33.23	5.67	-14.58	PASS
Bedroom	W1/2	38.90	33.63	5.27	-13.55	PASS
15 Mary's Terrace						
Ground Floor						
Living Room	WG/1	31.97	29.50	2.47	-7.73	PASS
Living Room	,	0,	27.00			
First Floor						
Bedroom 2	W1/1	38.91	34.10	4.81	-12.36	PASS
Bedroom 1	W1/2	38.90	34.45	4.45	-11.44	PASS
bediooni i	VV 1/ Z	30.70	34.43	4.45	-11.44	1 133
14 Mondo Torroso						
14 Mary's Terrace						
Ground Floor	MC /4	24.07	20.07	1.01	F 07	DACC
Living Room	WG/1	31.97	30.06	1.91	-5.97	PASS
<u>First Floor</u>						
Bedroom 1	W1/1	38.90	34.62	4.28	-11.00	PASS
Bedroom 2	W1/2	38.89	34.93	3.96	-10.18	PASS

DAYLIGHT ANALYSIS TEST ON NEIGHBOURING PROPERTIES

		EXISTING	PROPOSED	1.000	0/1.000	PASS/
Room	Window	VSC	VSC	VSC	%LOSS VSC	FAIL
ROOM	· · · · · · · · · · · · · · · · · · ·	•••	100	100	100	17112
13 Mary's Terrace						
Ground Floor						
Living Room	WG/1	32.19	30.08	2.11	-6.55	PASS
First Flagr						
First Floor Bedroom 2	W1/1	38.88	35.35	3.53	-9.08	PASS
Bedroom 1	W1/1	38.87	35.61	3.26	-8.39	PASS
Bedroom 1	*****	00.07	00.01	0.20	0.07	17.00
12 Mary's Terrace						
<u>Ground Floor</u>	1110/4	00.17	00.47	4.70	F 00	B400
Living Room	WG/1	32.16	30.46	1.70	-5.29	PASS
First Floor						
Bedroom 1	W1/1	38.89	35.74	3.15	-8.10	PASS
Bedroom 2	W1/2	38.85	35.96	2.89	-7.44	PASS
11 Mary's Terrace						
<u>Ground Floor</u>	WG/1	32.10	30.96	1.14	-3.55	PASS
Living Room	WG/2	32.49	31.15	1.34	-3.33 -4.12	PASS
		02.17	31.10		1.12	
First Floor						
Bedroom	W1/1	38.84	36.24	2.60	-6.69	PASS
Dearoom	W1/2	38.83	36.43	2.40	-6.18	PASS

SUNLIGHT ANALYSIS ON NEIGHBOURING PROPERTIES

			EXISTI	NG		PROPO	SED	LOSS	% LOSS	PASS/
Room	Window	Summer	Winter	Total	Summer	Winter	Total	Total		FAIL
2 COLE PARK ROAD Ground Floor Living Room	WG/2	58	24	82	58	20	78	4	-4.9	Pass
2B COLE PARK ROAD Ground Floor Room 1	WG/1	58	29	87	58	21	79	8	-9.2	Pass
2A COLE PARK ROAD Ground Floor Living Room	WG/2	37	19	56	37	14	51	5	-8.9	Pass
4 COLE PARK ROAD Ground Floor Living Room	WG/4	57	30	87	57	17	74	13	-14.9	Pass

DAYLIGHT ANALYSIS TEST ON PROPOSED UNITS

MARCH 2011

Room	Window	EXISTING VSC	PROPOSED VSC	LOSS VSC	%LOSS VSC
TWICKENHAM STATION BRIDGE LEVEL					
Block A					
Living / Kitchen / Diner	WG/01	N/A	27.50	N/A	N/A
Bedroom 1	WG/02	N/A	25.50	N/A	N/A
Bedroom 2	WG/03	N/A	25.00	N/A	N/A
Block B					
Living / Kitchen / Diner	WG/04	N/A	24.50	N/A	N/A
Bedroom 1	WG/05	N/A	26.00	N/A	N/A
Block C					
Bedroom 1	WG/06	N/A	38.50	N/A	N/A
Dedi Oom 1	WG/07	N/A	39.00	N/A	N/A
Living / Kitchen / Diner	WG/08	N/A	24.50	N/A	N/A

		EXISTING		PROPOSED		TOTAL	%LOSS	PASS/
Room	Window	ADF	TOTAL	ADF	TOTAL	LOSS	ADF	FAIL
TWICKENHAM STATION BRIDGE LEVEL Block A Living / Kitchen / Diner Bedroom 1	WG/01 WG/02	N/A N/A	N/A N/A	3.74 3.62	3.74 3.62	N/A N/A	N/A N/A	PASS PASS
Bedroom 2	WG/03	N/A	N/A	3.19	3.19	N/A	N/A	PASS
Block B Living / Kitchen / Diner Bedroom 1	WG/04 WG/05	N/A N/A	N/A N/A	2.56 5.52	2.56 5.52	N/A N/A	N/A N/A	PASS PASS
Block C Bedroom 1 Living / Kitchen / Diner	WG/06 WG/07 WG/08	N/A N/A N/A	N/A N/A	2.26 2.28 4.22	4.54 4.22	N/A N/A N/A	N/A N/A	PASS PASS

SUNLIGHT ANALYSIS ON PROPOSED UNITS

MARCH 2011

		EXISTING	PROPOSED	LOSS % LOSS	PASS/
Room	Window	Summer Winter Total Sun	nmer Winter Total	Total	FAIL

TWICKENHAM STATION BRIDGE LEVEL

Block A

Living / Kitchen / Diner WG/08 N/A N/A N/A 30 9 39 N/A N/A Pass

APPENDIX I: DAYLIGHT, SUNLIGHT, OVERSHADOWING AND SOLAR GLARE



Appendix I-5: **Daylight Distribution Results**

	\4/:	EXISTING	PROPOSED		%LOSS	PASS/
Room	Window	DD	DD	DD	DD	FAIL
2 COLE PARK ROAD						
Ground Floor						
· ·	WG/1	00.00	00.00	0.00	0.00	DACC
Room 1	WG/2	99.80	99.80	0.00	0.00	PASS
Room 2	WG/3	90.60	90.60	0.00	0.00	PASS
Room 3	WG/4	97.50	97.50	0.00	0.00	PASS
	WG/5					
First Floor						
Room 1	W1/1	92.90	92.90	0.00	0.00	PASS
Room 2	W1/2	95.10	95.10	0.00	0.00	PASS
Room 3	W1/3	98.90	98.90	0.00	0.00	PASS
2B COLE PARK ROAD						
Ground Floor Room 1	WG/1	98.10	97.00	1.10	-1.12	PASS
ROOM 1	WG/1	70.10	97.00	1.10	-1.12	FASS
Room 2	WG/3	99.90	99.60	0.30	-0.30	PASS
	WG/4					
First Floor						
Room 1	W1/1	99.10	99.10	0.00	0.00	PASS
Room 2	W1/2 W1/3	99.60	99.60	0.00	0.00	PASS
Room 3	W1/3 W1/4	98.30	98.20	0.10	-0.10	PASS PASS
Room 3	VV 17 1	70.50	70.20	0.10	-0.10	1 733
2A COLE PARK ROAD						
<u>Ground Floor</u>						
	WG/1					
Living Room	WG/2 WG/3	99.90	99.60	0.30	-0.30	PASS
_	WG/3 WG/4					
Dining Room	WG/5	99.00	89.80	9.20	-9.29	PASS
_	WG/6					
Kitchen	WG/7	90.80	90.80	0.00	0.00	PASS
First Floor						
Bedroom 2	W1/1	99.90	99.90	0.00	0.00	PASS
	W1/2 W1/3					
	W1/3 W1/4					
Bedroom 1	W1/5	99.90	99.80	0.10	-0.10	PASS
	W1/6					
Second Floor						
Bedroom 3	W2/1	99.30	99.30	0.00	0.00	PASS
	W2/2					

Do our	Window	EXISTING DD	PROPOSED DD	LOSS DD	%LOSS DD	PASS/ FAIL
Room	WIIIGOW	טט	טט	טט	טט	FAIL
4 COLE PARK ROAD Ground Floor						
Reception Room	WG/1 WG/2 WG/3 WG/4	98.70	98.70	0.00	0.00	PASS
Living Room	WG/5 WG/6 WG/7 WG/8	98.70	98.50	0.20	-0.20	PASS
Room 1	WG/9 WG/10 WG/11 WG/12	99.90	99.90	0.00	0.00	PASS
<u>First Floor</u>						
Bedroom 1	W1/1	97.20	97.20	0.00	0.00	PASS
Bedroom 2	W1/2 W1/3	98.30	98.30	0.00	0.00	PASS
16 Mary's Terrace Ground Floor Living Room	WG/1 WG/2	97.80	97.30	0.50	-0.51	PASS
<u>First Floor</u> Bedroom	W1/1 W1/2	97.60	97.10	0.50	-0.51	PASS
15 Mary's Terrace Ground Floor Living Room	WG/1	96.90	96.90	0.00	0.00	PASS
First Floor	1444.45					
Bedroom 2 Bedroom 1	W1/1 W1/2	95.60 96.80	95.60 96.80	0.00 0.00	0.00 0.00	PASS PASS
DEGLOCITI I	VV 1/∠	90.00	70.0U	0.00	0.00	rass .

Room	Window	EXISTING DD	PROPOSED DD	LOSS DD	%LOSS DD	PASS/ FAIL
						•
14 Marula Tarraga						
14 Mary's Terrace Ground Floor						
Living Room	WG/1	97.00	97.00	0.00	0.00	PASS
First Floor						
Bedroom 1	W1/1	95.70	95.70	0.00	0.00	PASS
Bedroom 2	W1/2	97.50	97.50	0.00	0.00	PASS
13 Mary's Terrace						
Ground Floor	WC /4	07.00	07.00		0.00	D.4.00
Living Room	WG/1	97.00	97.00	0.00	0.00	PASS
First Floor						
Bedroom 2	W1/1	96.70	96.70	0.00	0.00	PASS
Bedroom 1	W1/2	95.60	95.60	0.00	0.00	PASS
12 Mary's Terrace Ground Floor						
Living Room	WG/1	96.90	96.90	0.00	0.00	PASS
_						
First Floor Bedroom 1	W1/1	95.60	95.60	0.00	0.00	PASS
Bedroom 2	W1/2	98.10	98.10	0.00	0.00	PASS
11 Mary's Terrace						
Ground Floor						
Living Room	WG/1 WG/2	97.80	97.80	0.00	0.00	PASS
	VVG/Z					
First Floor						
Bedroom	W1/1 W1/2	97.50	97.50	0.00	0.00	PASS
	VV 1/∠					

DAYLIGHT DISTRIBUTION ANALYSIS ON PROPOSED UNITS

MARCH 2011

Room	Window	EXISTING DD	PROPOSED DD	LOSS DD	%LOSS DD	PASS/ FAIL
TWICKENHAM STATION BRIDGE LEVEL						
Block A						
Living / Kitchen / Diner	WG/01	N/A	99.40	N/A	N/A	PASS
Bedroom 1	WG/02	N/A	73.20	N/A	N/A	PASS
Bedroom 2	WG/03	N/A	88.90	N/A	N/A	PASS
Block B						
Living / Kitchen / Diner	WG/04	N/A	64.20	N/A	N/A	PASS
Bedroom 1	WG/05	N/A	99.90	N/A	N/A	PASS
Block C						
Bedroom 1	WG/06 WG/07	N/A	98.90	N/A	N/A	PASS
Living / Kitchen / Diner	WG/08	N/A	99.60	N/A	N/A	PASS