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GERALD EVE 2016 GRAPH AND TABLE OF LEASEHOLD / FREEHOLD RELATIVITIES

EXECUTIVE SUMMARY

1. This paper has been prepared by Julian Clark of Gerald Eve LLP to address the implications of the Upper Tribunal's decision on Relativity (the Mundy decision[1]), in so far as they relate to the Gerald Eve 1996 Graph and the reviewed version of the Graph that we published in December 2016 in the light of the Upper Tribunal's decision. The Mundy decision was published in May 2016 following the major group hearing on the issue of Leasehold / Freehold Relativity in Leasehold Reform Valuations which took place in January 2016.

2. In the decision, the Upper Tribunal gave its conclusions on a number of important issues relating to the valuation of leasehold interests in enfranchisement valuations. Amongst those conclusions, the Upper Tribunal held that by the time of the valuation dates for the appeal cases being February to April 2014:

   2.1. what is known as the Gerald Eve 1996 Graph of Relativities (the 1996 Graph) had become the "industry standard", adopted by practitioners when undertaking enfranchisement valuations in Prime Central London for valuing leasehold interests in residential properties subject to statutory claims to enfranchise or to extend their leases.

   2.2. leasehold / freehold relativities for properties without rights to enfranchise as shown by the 1996 Graph may (at least by 2014) have been overstated.

   2.3. there have been significant changes to the structure of the market since the 1996 Graph was created.

   2.4. contrary to market practice hitherto, the statutory assumption to disregard lessee's statutory rights to enfranchise when calculating the premium payable on enfranchisement or lease extension, should apply only to the property subject to the claim and not to the market as a whole. This is known as the No Act Bubble v the No Act World assumption.

3. In the light of the Upper Tribunal's conclusions, Gerald Eve reviewed the 1996 Graph and in December 2016 published a new table of relativities and graph to be known as the Gerald Eve 2016 Graph. For unexpired terms below 100 years relativities shown by the 2016 Graph are lower than those shown by the 1996 Graph and are the same as the 1996 Graph for terms above 100 years.

4. Whilst since its publication Gerald Eve have referred to the 2016 Graph in premium negotiations, the 1996 Graph has not been withdrawn and remains as a matter of record.

5. On publication, the 2016 Graph and Table of Relativities was circulated to over 70 enfranchisement valuers who practice in Prime Central London. Since then circulation has reached over 100 such valuers, including valuers practicing outside London.

[1] The Trustees of the Sloane Stanley Estate v A H Mundy [2016] UKUT 0223 (LC)

IMPLICATIONS OF THE MUNDY DECISION FOR THE 1996 GRAPH

Rejection of Parthenia Model for Hedonic Regression

6. The main purpose of the Mundy appeals was to determine, in relation to separate lease extension claims for three flats in prime central London, whether a new approach to the valuation of leasehold interests without rights to enfranchise, in the form of a hedonic regression analysis of historic leasehold and freehold sales in the period 1985 to 1991 (the Parthenia Model), was a valid method that should be adopted in favour of the prevailing market practice. In its examination of the Parthenia approach, the Upper Tribunal heard a broad range of evidence from chartered surveyors and other valuers specialising in enfranchisement valuations and financial and economic experts. Witness of fact evidence was called in relation to various published graphs of relativity. Concerning the Gerald Eve 1996 Graph and settlements, evidence of fact was presented by retired Gerald Eve partner Ian Macpherson and Julian Clark, then partner and head of enfranchisement at Gerald Eve.

7. For a number of technical and practical reasons, the Tribunal dismissed the Parthenia Model as unworkable[2]. It also found that, unlike the Gerald Eve 1996 Graph, the various relativity graphs produced by a number of other firms were not relied upon in the wider market and did not offer any assistance[3].

Gerald Eve 1996 Graph - "Industry Standard"

8. Concerning the 1996 Graph, the Tribunal concluded that "To all intents and purposes the Gerald Eve graph was the industry standard. Parties may have referred to other graphs but they were unlikely to have ignored the Gerald Eve graph"[4].

9. The Tribunal was "satisfied that the Gerald Eve Graph was the graph which was in most common use at the valuation dates for the flats in question for leases without rights under the 1993 Act[5].

10. Further, the Gerald Eve graph "did influence the market for leases with rights under the 1993 Act to the extent that parties to transactions for such leases wanted to calculate the likely amount of the premium payable for an extended lease."[6] That conclusion would apply equally to those wishing to purchase an enfanchiseable lease with a view to acquiring the freehold.

11. However, it is fair to say that the Tribunal did not feel able to give unqualified support to the Gerald Eve 1996 graph, as stated at paragraph 153 of the decision:

> "In Appendix C we discuss in detail the Gerald Eve graph and the Savills 2002 graph. We are not able to give an unqualified endorsement to the use of either of these graphs for the reasons set out in Appendix C. In particular, there is reason to think the relevant market forces at the valuation dates in 2014 would have been different from the relevant market forces at the times at which these two graphs were prepared; we refer to paragraphs 28 to 32 of Appendix B in this respect, the significance of which as regards the graphs is further explained in Appendix C. In this way, there is reason to believe that the relativities shown by these two graphs are higher than appropriate for the market which existed at the valuation dates."

Structural Changes in the Market

12. As quoted above the Tribunal had reason to believe that, in the light of the evidence it had heard, by 2014 the 1996 Graph overstated relativities for leases without rights. That evidence was recorded as follows:

    12.1. The Tribunal noted at paragraph 63 of Appendix C of the Decision that in their submissions to the RICS in December 2007 in response to the RICS's Working Party on Relativity, Gerald Eve had said that the relativities shown by the 1996 Graph may be overstated due to the exclusion of hope value from the landlord's interest by the Court of Appeal in Sportelli and the reduction in the deferment rates consequent upon the Sportelli decision.

    12.2. Three structural changes in the market were recorded at paragraphs 28 to 32 of Appendix B of the Decision as having occurred since the late 1980's / early 1990's such as to reduce relativities overall:

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[2] Mundy Decision paras 122 - 125
[3] Mundy Decision Appendix C paras 67 - 70
[4] Mundy Decision Appendix C para 63
[5] Mundy Decision Appendix C para 62
[6] Mundy Decision Appendix C para 62

12.2.1. Substantial and structural changes to the level of interest rates and discount rates. The evidence given by the financial and economic expert witnesses was that 10 year nominal zero coupon yield had fallen from circa 10% in the late 1980's to 2.9% in February 2014, which represented a reduction in real yields of over 4.2% after accounting for reductions in inflation over the same period. The Tribunal was told that "if discount rates went down the value of the future enjoyment of the leasehold property (whether expressed as the right to occupy or to rent out) would increase and therefore longer leases became worth relatively more than shorter leases".

12.2.2. Changes in the nature of the market. The Tribunal accepted evidence that since the late 1980's the market had changed with a greater influx of foreign purchasers who were less interested in short leases, with the majority of the purchasing group preferring longer leases. The evidence was that in the period 1986 to 1992, 32% of purchasers in prime central London were from overseas, with that figure rising to 54% for the period 2006 to 2015.

12.2.3. Changes in the institutional and legal structure of the residential market. The evidence given to the Tribunal was that over the period 1987 to 1991,+ 33% of flats in prime central London had leases of 60 years or less and that the figure had halved to 15% for the period 2010 to 2014. Conversely, over the same two periods, the proportion of leases with over 100 years unexpired had increased from 25.3% to 56.6%.

12.2.4. In addition, the Housing Act 1989 had reduced the relative attractiveness to a long leaseholder of holding over on termination of the lease, as pursuant to Schedule 10 of the 1989 Act, the right for a long leaseholder to hold over as a secure tenant paying a fair rent was phased out over the period 1989 to 1999, to be replaced by the less favourable right to the tenant of an assured tenancy at a market rent.

Finding in Law – "No-Act Bubble" Assumption

13. The Tribunal also made a finding in law on the statutory interpretation of the extent to which the exclusion of tenants' rights to enfranchise should apply in the valuation. That is whether it should be assumed that such leasehold rights are excluded from the whole market (the "No Act World") or only from the property subject to the claim, with the rest of the market holding whatever rights they might have (the "No Act Bubble").

14. The Tribunal commented at paragraph 16 of the Decision that what is termed the "No-Act Bubble" assumption applies and stated:

> "… One has to assess the open market value of the existing lease on the statutory assumptions. The notional sale is to be by a willing seller of the existing lease in the open market. The notional sale is by way of an assignment of the existing lease. The existing lease is assumed to be available on the open market and normally there will be many other properties on the market at the same time and, in so far as the other properties are leasehold flats, the leases of those other properties will typically have the benefit of the 1993 Act whereas the subject property, exceptionally, will not have the benefit of the 1993 Act. It was not in dispute that rights under the 1993 Act are valuable and so the existing lease, without those rights, will have to compete in the open market with other available leases which have those valuable rights."

15. This is an important conclusion so far as a review of the 1996 Graph is concerned, because the 1996 Graph was compiled on the basis of the "No Act World" assumption:

15.1. Firstly, the structure of the market prevailing over the period 1974-1996 during which the settlements forming the basis of the 1996 graph were achieved was such that there remained a significant proportion of the leasehold market that comprised nonenfranchiseable leases.

15.2. Secondly, it remained the common practice for valuers in the LRA sector, including Gerald Eve, to undertake LRA valuations on the basis of the "No Act World" assumption. That the practice prevailed for so long is shown by the fact that it is only as a result of the Mundy decision in 2016 that the correct operation of the statutory provisions has been clarified.

16. In arriving at the circa 3,500 settlements recorded by Gerald Eve since the 1996 Graph was created and before the 2016 Graph was published, in so far as they were negotiated against the background of the 1996 Graph and were settled consistent with it, so those settlements reflected a working assumption as to a No Act World rather than a No Act Bubble approach for the treatment of tenants' rights to enfranchise.

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Implications of the "No-Act Bubble" Assumption

17. The adverse impact on the value of a lease without rights to enfranchise should not be underestimated in the light of the Upper Tribunal's ruling that the disregard of rights to enfranchise applies to solely to the property subject of the claim, whilst other enfranchiseable properties remain in the market. This assumption coupled with the structural changes in the market outlined above means that the market for an unenfranchiseable lease is now much more restricted than when the 1996 Graph was compiled.

18. As confirmed by the Tribunal, the lease without rights must compete in the open market with the other available leases which have those valuable rights[7]. Given that purchasers, particularly foreign purchasers who now dominate the PCL market, are looking for as long a tenure as possible, the preference for such purchasers in the market will be:

    18.1. Firstly, to seek to acquire a freehold of a house or very long lease or share of freehold of a flat.

    18.2. If those interests are not available for the purchaser's preferred type of property or location, then the purchaser can seek to acquire a lease that is being sold with the benefit of a claim having been served with the purchaser acquiring the benefit of the claim together with the lease.

    18.3. Failing that, the purchaser can acquire a qualifying lease and once he has been the registered owner for two years he can serve his own notice of claim.

    18.4. Last in the pecking order will be the property subject to the claim in question that has a lease with no rights to enfranchise and which lacks the benefits of the statutory rights to enfranchise that are outlined in Appendix 1 to this paper. Invariably this will be the one leasehold flat in the block or the one house on the street to which such restrictions apply.

19. Such a scenario could render the lease without rights as practically unsaleable, particularly to foreign purchasers. However, it cannot be discounted that there exists a class of purchaser who is prepared to acquire a lease as a wasting asset, or to allow the lease to run to expiry and rely on whatever rights he or she may have, if at all, to continue in occupation as an assured tenant paying a market rent or to take their chances over negotiating with the freeholder to acquire an extended lease or the freehold on a voluntary basis.

20. For these reasons, after the publication of the Mundy decision, Gerald Eve undertook a review of the 1996 Graph to provide a new graph, the 2016 Graph, to show without rights relativities accounting for the "No Act Bubble" assumption combined with the structural changes in the market that have taken place since 1996.

THE GERALD EVE 2016 GRAPH

21. Having regard to these changes the Gerald Eve 1996 Graph was redrawn as the 2016 Graph showing relativities at a lower level across the range of unexpired terms, subject to retaining from the 1996 Graph following:

    21.1. zero relativity at zero years,

    21.2. 98.0% at 100 years,

    21.3. 98.5% at 115 years and

    21.4. 99.0% for 130 years and above.

22. Consistent with the 1996 Graph, the 2016 Graph shows the value of leasehold interests as a percentage of the corresponding freehold interest for different unexpired terms and for which the leasehold interests are assumed to be subject to nominal ground rents and exclusive of tenants' rights to enfranchise.

23. The relativities at 100 years and above have been retained, because, notwithstanding the benefit of being able to extend or enfranchise an enfranchiseable lease that has more than 80 years to run without paying marriage value, the structural changes outlined at above have had less of an adverse impact for very long leases without rights. Also, where a mid-term or shorter lease of a flat has already been extended under the 1993 Act, it is rare for a lessee to serve a second claim to extend what would then be a lease for some 100 or more years. That said, second or even third extensions do occur, so this aspect of the Review Graph may require further attention in the future if it becomes clear that the frequency of second or third extensions increases with time.

24. The next step was to reconsider the relativity for a lease of 25 years, which in the 1996 Graph was shown to have a relativity of 50%. The 25 year point was chosen over other years as it represented a form of pivot point in the 1996 Graph having half the value of the corresponding freehold. Having regard to all the factors outlined above, we considered that a reduction in the relativity at 25 years by circa 10% of freehold value or 5 percentage points compared to the 1996 Graph would be fair, if not on the conservative side with the curve above and below being adjusted downwards and smoothed, whilst retaining zero relativity at zero years and 98% at 100 years. On that basis the revised relativity at 25 years would be circa 45%, although due to the smoothing exercise for the curve as a whole, the 2016 Graph shows 44.237% at 25 years in the final version.

[7] Mundy Decision paras 122 - 125

25. In redrawing the remainder of the curve above and below 25 years, the relativities at one yearly intervals have been reduced progressively compared to the 1996 Graph to provide a curve which rises year on year from zero to 100 years in as smooth a curve as possible without the step changes that were a feature of the 1996 Graph. At the lower end of the range of years unexpired, regard has been taken of the Upper Tribunal decision known as Vale Court, in which the emerging guidance was that for leases with very short terms unexpired of 5 years or less the value of the lease should be assessed on a rental yield approach. The resulting relativity for the 4.75 year terms for the relevant flats in Vale Court was determined at 8.0% of the corresponding freehold value on the evidence before the Tribunal in that case. The rental yield approach for short leases is likely to generate equivalent relativities peculiar to each case. However, it is logical for there to be some form of smoothing effect across a wider selection of short leases and at the boundaries when the length of the "short" lease is such that it can no longer be considered short enough for the rental yield approach to apply. For that reason, the 2016 Graph reflects a smoothing pattern at lower lease terms with the relativity at 5 years unexpired being just under 9.75% (9.71% in the final version), compared to the corresponding relativity for 5 years in the 1996 Graph which was 15.0%.

26. The smoothing exercise has resulted in a curve for the 2016 Graph that broadly speaking shows reductions in leasehold value compared to the 1996 Graph of 35.27% of value at 5 years, falling to a 11.53% reduction in value at 25 years. Above 25 years, the percentage reduction in leasehold value compared to the 1996 Graph falls steadily year on year, subject to some blips, until parity is reached at 98% at 100 years. The blips in question occur at some intervening years because of a number of small step changes that were inherent in the 1996 Graph and which have been smoothed out in the 2016 Review Graph.

27. The final published version of the 2016 Graph is shown in graphical and tabular form in, respectively, Appendices 2 and 3 to this paper, together with a comparison with the 1996 Graph at Appendix 4 (graph) and Appendix 5 (table).

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Gerald Eve LLP
October 2020

APPENDICES

APPENDIX 1 – THE BENEFITS TO LEASEHOLDERS OF STATUTORY RIGHTS TO ENFRANCHISE

APPENDIX 2 – THE 2016 GRAPH OF RELATIVITIES

APPENDIX 3 – THE 2016 TABLE OF RELATIVITIESE

APPENDIX 4 – COMPARISON: 2016 GRAPH RELATIVITIES CF 1996 GRAPH (GRAPH)

APPENDIX 5 – COMPARISON: 2016 GRAPH RELATIVITIES CF 1996 GRAPH (TABLE)

APPENDIX 1

THE BENEFITS TO LEASEHOLDERS OF STATUTORY RIGHTS TO ENFRANCHISE

1. The existence of rights to enfranchise is a considerable benefit to the leaseholder who qualifies compared to the leaseholder who does not for a number of reasons:

   1.1. Provided that a leaseholder meets the prevailing qualifications to enfranchise, he or she has the right, at a time of their choosing and not that of the freeholder, to serve a notice of claim to acquire the freehold or to acquire an extended lease.

   1.2. The freeholder or the competent landlord if the freehold reversion is long dated cannot, except in very limited circumstances such as when the lease is near to expiry and the freeholder has plans to redevelop, refuse a valid claim to enfranchise simply because it does not suite the freeholder's purposes to sell at that time.

   1.3. Apart from wresting control from the freeholder, the leaseholder's right to enfranchise means that a qualifying leaseholder's interest is no longer a wasting asset. The leaseholder as the opportunity to benefit from long term capital appreciation and can offer the lease as security against loans.

   1.4. A qualifying leaseholder can acquire the freehold of a house or the extended lease of a flat in two stages to suite his financial circumstances. First, he can acquire a suitable property let on an enfranchiseable lease and second, once he satisfies the minimum statutory two year ownership criteria and when it suites his purposes, he can serve a notice to enfranchise.

   1.5. The benefit of a claim to enfranchise can be assigned together with the lease, so that a purchaser looking to acquire a freehold or an extended lease can short circuit the qualification criteria by acquiring a qualifying lease from a vendor who has already served a valid notice of claim and taking over the claim.

   1.6. The valuation date for calculating the premium is fixed at the date of claim, so other than a continuing liability to pay any ground rent due and the initial payment of a deposit, the claimant can benefit from any delays in the enfranchisement process as there is no requirement to pay the freeholder any interest on the enfranchisement price that might otherwise have accrued over the intervening period to completion. This is a considerable benefit to the lessee as the period from claim to completion can extend to months if not years.

   1.7. The fixed valuation date rule is an additional benefit in a rising market, as the lessee will retain any uplift in values that accrue over the period to completion.

   1.8. If the market is falling during the period of the claim, the lessee can take a view and if it suites him, he can withdraw the claim on the condition that a fresh claim cannot be served for another twelve months or longer if the lessee has still to meet the two year ownership period.

   1.9. The ability of a leaseholder who holds an enfranchiseable lease to serve a valid claim right up to the term date of the lease means that he has the security to undertake improvements to the property at any time, even when the period remaining on the term might otherwise be too short to render the works financially viable had the leaseholder no rights to enfranchise.

   1.10. Further, the enfranchisement price is to be calculated on the statutory assumption that the value of any improvements undertaken by the lessee or their predecessors in title is to be disregarded. This is to ensure that the lessee does not pay twice for improvement works he has undertaken which is understandable. However, there is an additional benefit to a tenant looking to acquire the freehold of an improved house using the two stage process. Firstly he can acquire an enfranchiseable lease of a house that has been improved by the vendor and pay a price that reflects those improvements, but when he comes to serve a claim for the freehold, the enfranchisement price he will pay to "top-up" his interest to the freehold will exclude the value of those improvements. Accordingly, the tenant is able to acquire the freehold of an improved house for a lower combined price through this two stage process than had he sought to acquire on the open market the unencumbered freehold of an identical improved house. The same scenario can apply in respect of an improved flat let on an enfranchiseable lease.

   1.11. The enfranchisement price is calculated on the statutory assumption that the freeholder is a willing vendor and that the leaseholder retains 50% of the marriage value, even though in the context of a voluntary negotiation where the lessee has no rights to enfranchise, the freeholder might well require that he receives a greater than 50% of the marriage value in order to be persuaded to sell his interest.

1.12. The statutes provide that where a notice of claim is served in respect of an enfranchiseable lease that has more than 80 years unexpired, then the landlord's 50% share of marriage value is excluded from the premium payable. This is a benefit because although premium levels are not substantial at this length of lease, the exclusion of the landlord's 50% share of marriage value can reduce the premium by up to one half.

1.13. The lessee is not beholden to the demands of the freeholder when negotiating the premium. He has the right to have the price determined by an independent tribunal and is not at risk as to costs apart from his own unless he acts unreasonably.

1.14. A lessee can use the tribunal and appeals litigation process to extend the period to completion at minimal cost to himself, for instance by seeking an application for leave to appeal a decision that might otherwise have been acceptable to him.

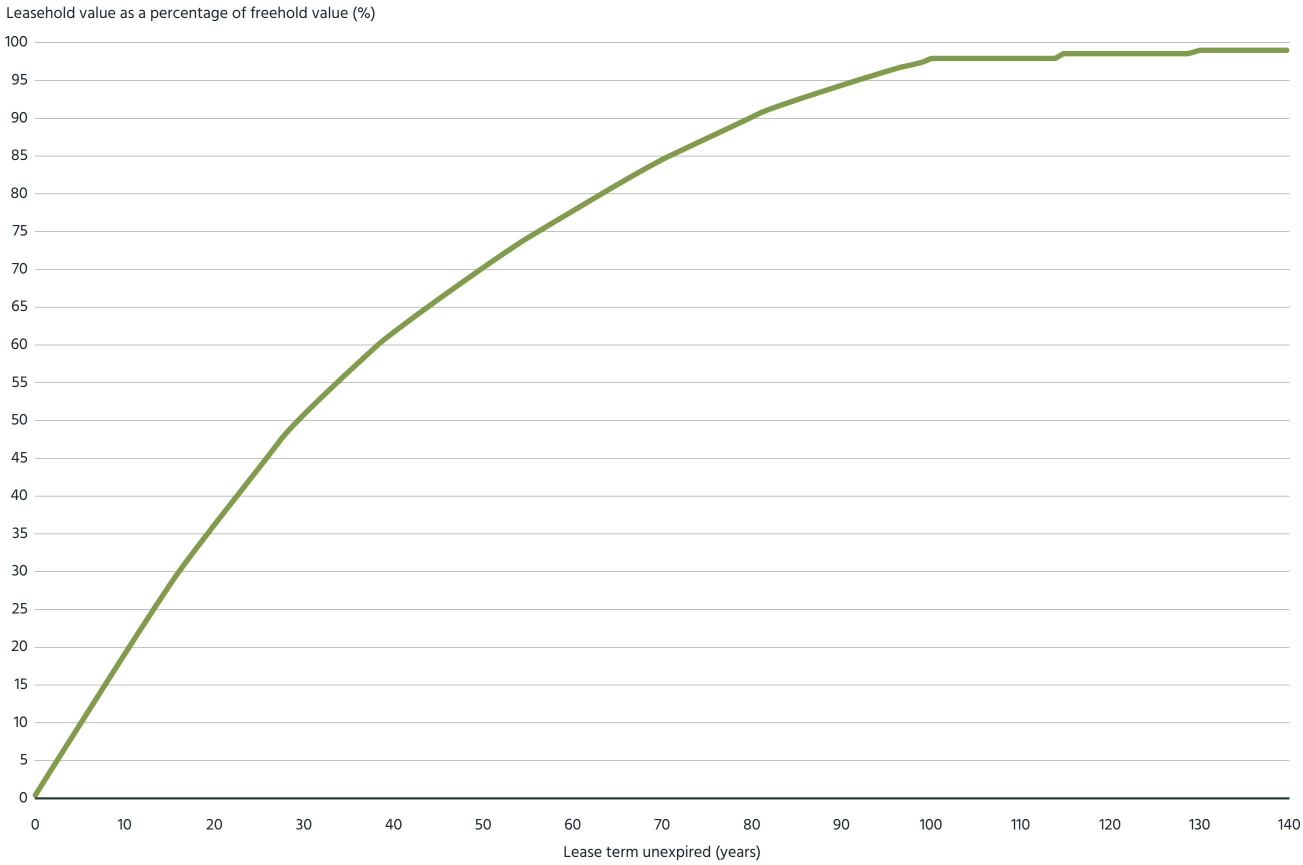
1.15. A lessee can also deploy legitimate tactics between settlement and completion to maximise the available period before he must either complete or be at risk of losing the claim. In a rising market such tactical delays can be self-financing for a lessee.

APPENDIX 2

THE 2016 GRAPH OF RELATIVITIES

Graph of relativities

Source: Gerald Eve



Value of leasehold interests compared to value of corresponding freehold for different unexpired terms
Leasehold interests are assumed to be subject to nominal ground rents and exclusive of tenants' rights to enfranchise

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APPENDIX 3

THE 2016 TABLE OF RELATIVITIES

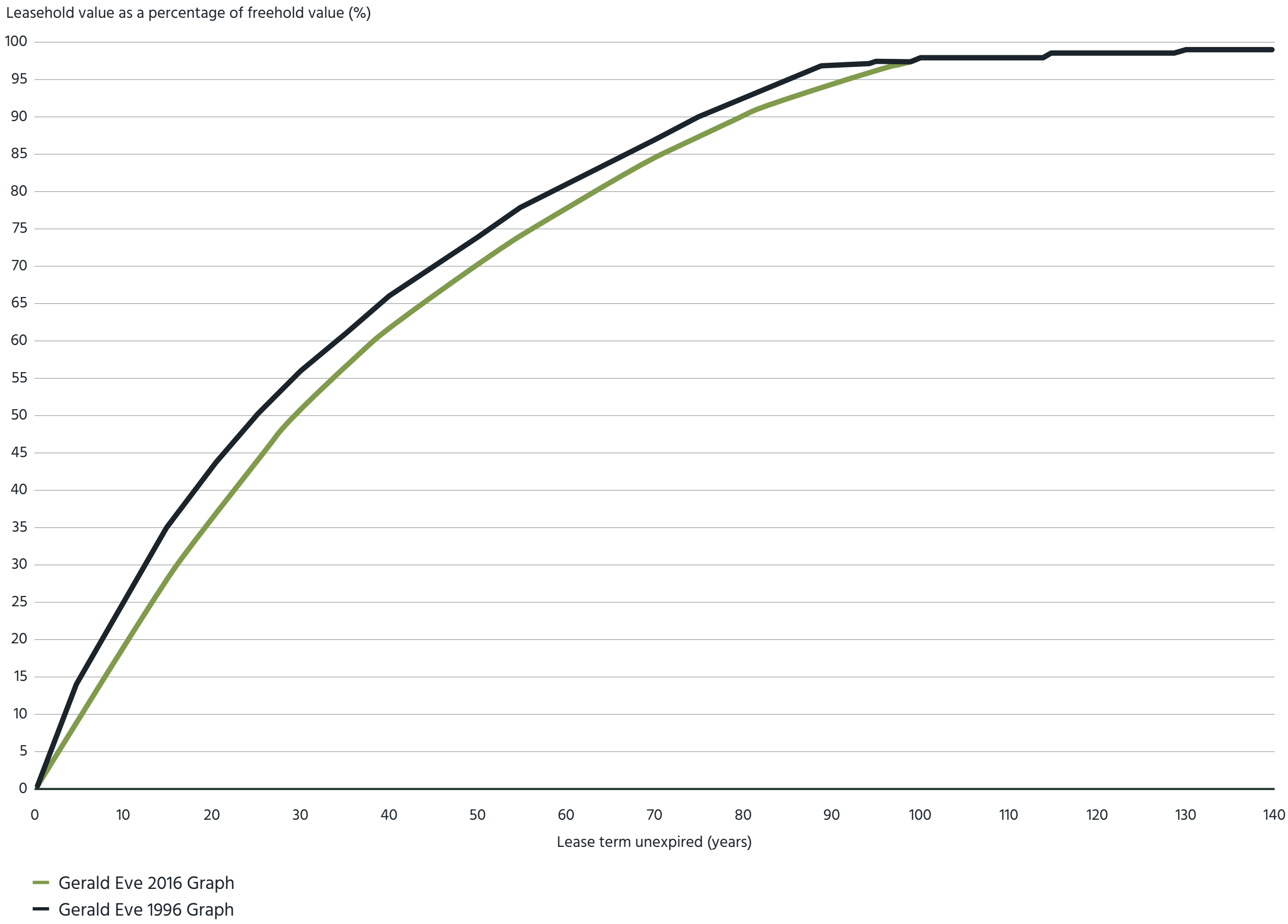
Lease Term unexpired	Relativity at a given year	Lease Term unexpired	Relativity at a given year	Lease Term unexpired	Relativity at a given year	Lease Term unexpired	Relativity at a given year
0	0.000%	33	54.818%	66	82.380%	99	97.758%
1	1.944%	34	55.936%	67	83.030%	100	98.000%
2	3.888%	35	57.052%	68	83.669%	101	98.000%
3	5.832%	36	58.167%	69	84.298%	102	98.000%
4	7.776%	37	59.183%	70	84.927%	103	98.000%
5	9.710%	38	60.168%	71	85.556%	104	98.000%
6	11.643%	39	61.122%	72	86.150%	105	98.000%
7	13.546%	40	62.015%	73	86.732%	106	98.000%
8	15.427%	41	62.908%	74	87.302%	107	98.000%
9	17.288%	42	63.802%	75	87.873%	108	98.000%
10	19.134%	43	64.681%	76	88.444%	109	98.000%
11	20.980%	44	65.546%	77	88.975%	110	98.000%
12	22.779%	45	66.370%	78	89.492%	111	98.000%
13	24.559%	46	67.193%	79	89.996%	112	98.000%
14	26.318%	47	68.029%	80	90.502%	113	98.000%
15	28.077%	48	68.858%	81	91.007%	114	98.000%
16	29.835%	49	69.680%	82	91.472%	115	98.500%
17	31.527%	50	70.493%	83	91.924%	116	98.500%
18	33.194%	51	71.307%	84	92.364%	117	98.500%
19	34.838%	52	72.105%	85	92.790%	118	98.500%
20	36.489%	53	72.896%	86	93.216%	119	98.500%
21	38.139%	54	73.678%	87	93.622%	120	98.500%
22	39.698%	55	74.471%	88	94.016%	121	98.500%
23	41.226%	56	75.264%	89	94.400%	122	98.500%
24	42.724%	57	76.017%	90	94.781%	123	98.500%
25	44.237%	58	76.760%	91	95.162%	124	98.500%
26	45.750%	59	77.492%	92	95.514%	125	98.500%
27	47.142%	60	78.222%	93	95.855%	126	98.500%
28	48.497%	61	78.952%	94	96.186%	127	98.500%
29	49.814%	62	79.653%	95	96.515%	128	98.500%
30	51.137%	63	80.345%	96	96.845%	129	98.500%
31	52.460%	64	81.026%	97	97.154%	130 & above	99.000%
32	53.659%	65	81.703%	98	97.459%		

Value of leasehold interests compared to value of corresponding freehold for different unexpired terms
Leasehold interests are assumed to be subject to nominal ground rents and exclusive of tenants' rights to enfranchise

APPENDIX 4

COMPARISON BETWEEN 2016 GRAPH OF RELATIVITIES AND 1996 GRAPH

Comparison between 2016 Graph of Relativities and 1996 Graph
Source: Gerald Eve



Gerald Eve graphs of relativities 2016 graph and 1996 graph

Value of leasehold interests compared to value of corresponding freehold for different unexpired terms

Leasehold interests are assumed to be subject to nominal ground rents and exclusive of tenants' rights to enfranchise

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APPENDIX 5

COMPARISON BETWEEN 2016 GRAPH OF RELATIVITIES AND 1996 GRAPH

Lease Term unexpired	2016 Review % of FHVP	1996 Graph % of FHVP	Unit reduction in Relativity at any given year 1996 Graph Relativity less 2016 Review for the same year	Unit Reduction in Relativity shown as a % of 1996 Graph for any given year
0	0.000%	0.00%		
1	1.944%	3.00%	1.06%	35.200%
2	3.888%	6.00%	2.11%	35.200%
3	5.832%	9.00%	3.17%	35.200%
4	7.776%	12.00%	4.22%	35.200%
5	9.710%	15.00%	5.29%	35.267%
6	11.643%	17.00%	5.36%	31.511%
7	13.546%	19.00%	5.45%	28.707%
8	15.427%	21.00%	5.57%	26.537%
9	17.288%	23.00%	5.71%	24.835%
10	19.134%	25.00%	5.87%	23.464%
11	20.980%	27.00%	6.02%	22.297%
12	22.779%	29.00%	6.22%	21.450%
13	24.559%	31.00%	6.44%	20.778%
14	26.318%	33.00%	6.68%	20.248%
15	28.077%	35.00%	6.92%	19.780%
16	29.835%	36.60%	6.76%	18.483%
17	31.527%	38.20%	6.67%	17.470%
18	33.194%	39.80%	6.61%	16.597%
19	34.838%	41.40%	6.56%	15.850%
20	36.489%	43.00%	6.51%	15.142%
21	38.139%	44.40%	6.26%	14.100%
22	39.698%	45.80%	6.10%	13.323%
23	41.226%	47.20%	5.97%	12.656%
24	42.724%	48.60%	5.88%	12.091%
25	44.237%	50.00%	5.76%	11.526%
26	45.750%	51.20%	5.45%	10.645%
27	47.142%	52.40%	5.26%	10.035%
28	48.497%	53.60%	5.10%	9.521%
29	49.814%	54.80%	4.99%	9.099%
30	51.137%	56.00%	4.86%	8.684%
31	52.460%	57.00%	4.54%	7.966%
32	53.659%	58.00%	4.34%	7.485%
33	54.818%	59.00%	4.18%	7.089%
34	55.936%	60.00%	4.06%	6.773%
35	57.052%	61.00%	3.95%	6.472%
36	58.167%	62.00%	3.83%	6.182%
37	59.183%	63.00%	3.82%	6.059%
38	60.168%	64.00%	3.83%	5.988%
39	61.122%	65.00%	3.88%	5.966%
40	62.015%	66.00%	3.99%	6.038%
41	62.908%	66.80%	3.89%	5.826%
42	63.802%	67.60%	3.80%	5.618%
43	64.681%	68.40%	3.72%	5.437%
44	65.546%	69.20%	3.65%	5.280%
45	66.370%	70.00%	3.63%	5.186%
46	67.193%	70.80%	3.61%	5.095%
47	68.029%	71.60%	3.57%	4.987%
48	68.858%	72.40%	3.54%	4.892%
49	69.680%	73.20%	3.52%	4.809%
50	70.493%	74.00%	3.51%	4.739%
51	71.307%	74.80%	3.49%	4.670%
52	72.105%	75.60%	3.49%	4.622%
53	72.896%	76.40%	3.50%	4.587%
54	73.678%	77.20%	3.52%	4.562%
55	74.471%	78.00%	3.53%	4.524%
56	75.264%	78.60%	3.34%	4.245%
57	76.017%	79.20%	3.18%	4.019%
58	76.760%	79.80%	3.04%	3.810%
59	77.492%	80.40%	2.91%	3.617%
60	78.222%	81.00%	2.78%	3.430%
61	78.952%	81.60%	2.65%	3.245%
62	79.653%	82.20%	2.55%	3.098%
63	80.345%	82.80%	2.46%	2.965%
64	81.026%	83.40%	2.37%	2.847%
65	81.703%	84.00%	2.30%	2.735%
66	82.380%	84.60%	2.22%	2.624%
67	83.030%	85.20%	2.17%	2.547%
68	83.669%	85.80%	2.13%	2.483%
69	84.298%	86.40%	2.10%	2.433%
70	84.927%	87.00%	2.07%	2.383%
71	85.556%	87.60%	2.04%	2.333%
72	86.150%	88.20%	2.05%	2.324%
73	86.732%	88.80%	2.07%	2.329%
74	87.302%	89.40%	2.10%	2.347%
75	87.873%	90.00%	2.13%	2.363%
76	88.444%	90.50%	2.06%	2.271%
77	88.975%	91.00%	2.02%	2.225%
78	89.492%	91.50%	2.01%	2.194%
79	89.996%	92.00%	2.00%	2.178%
80	90.502%	92.50%	2.00%	2.160%
81	91.007%	93.00%	1.99%	2.143%
82	91.472%	93.50%	2.03%	2.169%
83	91.924%	94.00%	2.08%	2.208%
84	92.364%	94.50%	2.14%	2.260%
85	92.790%	95.00%	2.21%	2.326%
86	93.216%	95.50%	2.28%	2.391%
87	93.622%	96.00%	2.38%	2.477%
88	94.016%	96.50%	2.48%	2.574%
89	94.400%	97.00%	2.60%	2.680%

APPENDIX 5

COMPARISON BETWEEN 2016 GRAPH OF RELATIVITIES AND 1996 GRAPH

Lease Term unexpired	2016 Review % of FHVP	1996 Graph % of FHVP	Unit reduction in Relativity at any given year 1996 Graph Relativity less 2016 Review for the same year	Unit Reduction in Relativity shown as a % of 1996 Graph for any given year
90	94.781%	97.00%	2.22%	2.288%
91	95.162%	97.00%	1.84%	1.894%
92	95.514%	97.00%	1.49%	1.532%
93	95.855%	97.00%	1.14%	1.180%
94	96.186%	97.00%	0.81%	0.839%
95	96.515%	97.50%	0.99%	1.010%
96	96.845%	97.50%	0.66%	0.672%
97	97.154%	97.50%	0.35%	0.354%
98	97.459%	97.50%	0.04%	0.042%
99	97.758%	97.50%	-0.26%	-0.265%
100	98.000%	98.00%	0.00%	0.000%
101	98.000%	98.00%		
102	98.000%	98.00%		
103	98.000%	98.00%		
104	98.000%	98.00%		
105	98.000%	98.00%		
106	98.000%	98.00%		
107	98.000%	98.00%		
108	98.000%	98.00%		
109	98.000%	98.00%		
110	98.000%	98.00%		
111	98.000%	98.00%		
112	98.000%	98.00%		
113	98.000%	98.00%		
114	98.000%	98.00%		
115	98.500%	98.50%		
116	98.500%	98.50%		
117	98.500%	98.50%		
118	98.500%	98.50%		
119	98.500%	98.50%		
120	98.500%	98.50%		
121	98.500%	98.50%		
122	98.500%	98.50%		
123	98.500%	98.50%		
124	98.500%	98.50%		
125	98.500%	98.50%		
126	98.500%	98.50%		
127	98.500%	98.50%		
128	98.500%	98.50%		
129	98.500%	98.50%		
130	99.000%	99.00%		

Gerald Eve graphs of relativities 2016 graph and 1996 graph

Value of leasehold interests compared to value of corresponding freehold for different unexpired terms

Leasehold interests are assumed to be subject to nominal ground rents and exclusive of tenants' rights to enfranchise