

Matter 7: Viability - Hearing Statement, Matthew O'Connell

Introduction & General Commentary ("Section A")

We have now been able to review the additional Hyas work (EXD/058) as well as viability consultation submissions from other parties, including that of NEGC Ltd which was surprisingly submitted as a consultation response rather than as a document for consultation. Indeed we have produced as simple as possible a table (Appendix A herein) which attempts to summarise the approaches and inputs of the Viability Seminar participants.¹

A common theme prevalent across these submissions is a failure to consider adequately the long-term nature and associated higher risk profile of the project(s) in question (note that in this document we will focus on West of Braintree ("WOB") but the majority of observations will be valid across all three sites).

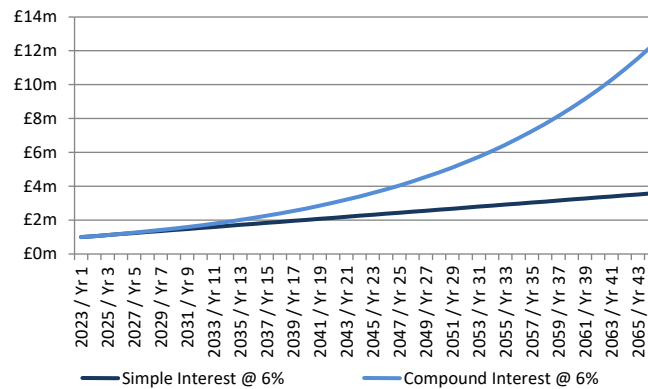
This was an aspect we emphasised in our consultation submission, focusing on simple and realistic sensitivities to the Hyas analysis in order to show that the viability of West of Braintree is – at the very best – marginal. This renders the site unsound: one of the most commonly returned to points in the Harman viability guidance is that (p.16) *"Given the clear emphasis on deliverability within the NPPF, Local Plan policies should not be predicated on the assumption that the development upon which the plan relies will come forward at the 'margins of viability'"*.

While we previously referred to the "leveraged" nature of the project in our consultation submission, it seems important to focus on this briefly here as it will inform a number of our answers to the Inspector's questions, including – but not limited to – question 11.

"Compound Interest" is sometimes described by investors as the "Eighth Wonder of the World" due to the outsized positive impact it has on long term returns; for a borrower, on the other hand, the situation is exactly the reverse, an outsized punitive impact. Specifically, where interest on debt is being paid annually from cashflow (e.g. in a positive net cashflow project), simple interest effectively applies; but where money is being borrowed (e.g. in a negative net cashflow project) to fund interest on debt, compound interest effectively applies. The chart below demonstrates how for longer term projects (over 10 years) where applicable compounding interest on debt becomes increasingly more significant and indeed outsized in its impact.

¹ While the related clarificatory submissions requested and accepted by the Inspector are generally detailed enough to allow the submission of such a table to be meaningful, we note that we cannot exclude the possibility of errors or inaccuracies in the representation of the approaches/inputs of others.

Figure 1 – Illustration of Required Gross Repayment of £1m based on Simple vs. Compound Interest



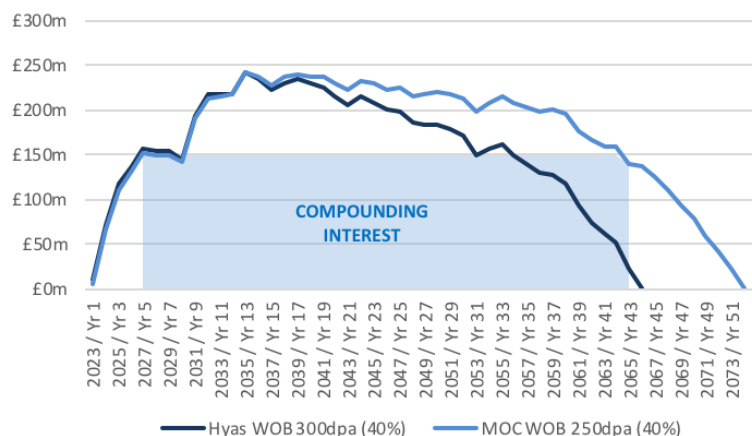
Note: 6% interest cost is used here so as to be comparable to Hyas; as we have emphasised in MOC/STA and MOC/VIA, this is too low.

This explains – as simply as possible – a key reason why the viability of the project is so sensitive to key inputs: any additional infrastructure spend in the early phases, any slowing of delivery rate, any higher profit assumption for developers, basically anything which decreases cashflow (and makes it even more negative in the case of long periods of the project) increases debt further and drives borrowing to pay the interest on the debt, leading to that interest compounding.

It is worth noting that this is a key factor in why smaller sites (<2500 dwellings) tend to be far more viable – an area which CAUSE has written persuasively on, including why the absence of any viability testing (even of a more “sample” nature) of sites at smaller sizes has been so inappropriate in the context of this Local Plan process, including the recent Additional Sustainability Appraisal.

One illustration from many available is the impact which 250dpa delivery (as prescribed for viability analysis by the Inspector) vs. 300dpa (Hyas and others) has on the borrowing profile across the project; the period – relating to the “longer” 250dpa scenario – where compound interest has a large impact (initially in increasing debt but then in hindering the ability to pay down debt) is highlighted.

Figure 2 – WOB Cumulative Negative Cashflow Profile



Note: Our WOB 250dpa scenario is used in the above as we believe the new Hyas scenario is too optimistic on infrastructure phasing, as discussed below. Positive numbers in the chart refer to cumulative cash deficit, i.e. required financing.

It will likely be intuitive for the majority of hearing participants how important sensitivity analysis is in relation to all projects but especially ones like this where small changes to assumptions cause huge swings in the output (Residual Land Value or whatever other output an analysis is examining).

As a simple and direct example related to the chart above, Hyas have rephased infrastructure costs in their new 250dpa WOB modelling in too optimistic a fashion in our view (specifically Other Itemised and Other should in almost all cases not have been moved to later periods) and comparing their outputs to our own for 250dpa in MOC/VIA, even this reasonably specific phasing assumption drives a significant difference in results: c.£70k/acre reduction in our analysis vs. a c.£45k/acre reduction in their analysis.

However, sensitivity analysis is largely noteworthy for its absence across the other viability papers – beyond +/-5% sales vs costs type tables which are relevant to project risk but are somewhat secondary items in the context of these projects when compared with items sensitised in our MOC/VIA paper – with almost all participants most remarkably not even showing sensitivities which include the Inspector's requested assumptions.

We must question why this is the case – why would Hyas (most disappointingly given the public sector aspect of their mandate) as well as all developers, only submit what is effectively an “upside” model without an adequate examination of a realistic range of viability scenarios and the implications of those scenarios? The Harman guidance is very clear on the importance in relation to longer term projects of (p.27) *“very cautious and transparent assumptions with sensitivity testing of the robustness of those assumptions”*.

Where are these cautious assumptions? Where is a suitable range of sensitivity testing? Where indeed is there any recognition in the viability studies that this project is at all different to a short-term housing development? Is it even vaguely credible that these studies are possibly reflective of a “through the economic cycle” reality?

One simple test worth applying by way of illustration: would these studies be suitable on a standalone basis for a finance provider to offer long-term, large-scale financing on the basis of? It is clear that they would not be: a finance provider would expect to see (or run themselves) a number of “financing” and “downside” cases as well as extensive sensitivity analysis; only if the result of those exceeded an acceptable threshold would the project be considered viable.

WOB and the other projects are ambitious, long-dated, unprecedented in some aspects, and this is simply not reflected by appropriate consideration in the viability studies provided by Hyas, NEGC or developers. Even before their collective failure to use the Inspector's requested assumptions is considered, we strongly assert that viability (particularly of a non-marginal nature) is not demonstrated robustly in the studies submitted by any of Hyas, NEGC or developers.

In the section below we set out our answers to the Inspector's questions, referring to the above Introduction and General Commentary (Section A) where required.

Inspector's Q&A

Issues

Is there robust evidence to demonstrate that the proposed GCs are financially viable?

No. In particular refer to MOC/VIA and Section A herein on the matter of the non robust nature of the evidence.

Questions for all participants, including the NEAs

2. Is adequate provision made for the costs of infrastructure at the GCs in the 2019 Hyas VAU?

No. There are two particular areas of concern:

i) Rapid Transit

The report – and now hearing statement – from Steve Johnstone of LW Limited emphasise that the capital costs for the RTS should be around 3x the levels included in the Hyas VAU, while the RTS phasing is entirely inappropriate given the development trajectory of the GCs. We refer to Mr Johnstone's hearing statement for a detailed explanation of this.

Furthermore (and incrementally to Mr. Johnstone's observations), we would note that it appears the comparable base capital costs for Bristol and Salford referred to in EXD049 have not been adjusted for inflation such that they are at present day values (the schemes are now complete and a large part of the development was a significant time ago, in terms of inflation becoming relevant in size) – they are likely 15-20% too low.

Finally, as set out in detail in MOC/VIA (including the viability implications for WOB), Route 4 of the RTS is not included in the viability study at all despite the critical importance of it (see Mr. Johnstone's report but even the Sustainability Appraisal emphasises the lower modal share impact without it).

Summarising briefly, if RTS were included in appropriate quantum (even without rephrasing), residual land values for WOB would be sub-EUV. This omission in itself is enough to render the Plan unviable.

ii) NEGC

Costs for NEGC Ltd have been excluded entirely from the VAU despite the entity (or some successor entity) apparently having a key role in the stewardship of the GCs over the life of the project.

3. Apart from housing delivery rates and infrastructure costs (to be discussed under Matters 5 & 6), a number of other changes have been made to the inputs to the 2019 Hyas VAU compared with the 2017 Hyas VA [EB/013], including:

We will comment below on the areas we believe of most materiality. As an overarching comment, we would note that in general assumptions have readily been decreased (so as to be "viability

positive”) but beyond the mandated infrastructure additions there has been very little by way of adjustments in the opposite direction.

a) land-use and development breakdown

b) infrastructure costs

Infrastructure costs are markedly different because of the inclusion now of (only) part of an appropriate RTS capital cost. As per the answer to (2) above, these costs are significantly inadequate.

c) build costs

d) specific inclusion of flats in the development mix

e) plot external costs

15% has been decreased to 10% with no justification.

f) sales values

g) plot developer profit rate

This has been decreased from 20% to 15% with poor justification. See MOC/VIA for detailed commentary on this important area and note also in Appendix A how profit levels are lower in Hyas than in any other study.

h) contingencies

See MOC/VIA (as well as CAUSE’s viability paper) for commentary on how the 40% sensitivity testing should be applied across Infrastructure items – the impact on viability from infrastructure is of course very significant, so this (40% across all items) is exactly the sort of meaningful sensitivity which should have been run.

i) proportions of affordable rented and intermediate housing

j) use of inflation rates

We fully endorse CAUSE’s detailed comments on this topic and would also refer to our own comments in MOC/VIA. Inflation’s only role in the VAU is as an inappropriate tool to try to improve the viability narrative.

Are those changes justified? (See above)

4. Are sufficient contingency allowances built into the 2019 Hyas VAU?

No. We believe that 40% should be applied across all infrastructure items as an appropriate sensitivity test given the large scale and long term nature of the plans.

We refer again to the RTS commentary in (2) and emphasise that at a 40% contingency the RTS infrastructure costs are still highly inadequate.

5. Is 6%, as employed in the 2019 Hyas VAU, an appropriate rate for the cost of capital?

No. See MOC/STA for detailed commentary and MOC/VIA for further commentary and sensitivity analysis showing that this is a key problem with the Hyas VAU.

We note also (see Appendix A) that developers see 6% as the very lowest appropriate finance cost (Savills rightly acknowledge the relevance of market conditions to the achievable finance rate) and given the “upside case” nature of the developer analysis, this casts further doubt on the suitability of the assumption. Indeed we note relatively “throwaway” comments within the developer analyses to finance rates being in line with comparable projects but this seems far too ready to overlook the scale of these projects and certain very relevant factors in the context of financing (e.g. land being purchased over time).

6. Accepting the assumption that land will be purchased two years before it is required for development, does the 2019 Hyas VAU correctly calculate interest on land purchase?

Yes (but using a finance cost which is too low).

7. Is the assumption that land will be purchased two years before it is required for development a sound one to make?

No. In the context of delivery rates varying over time through economic cycles, other delivery issues, land negotiations and so on, the idea that the land perfectly becomes available for sale imminently before it is required is fanciful at best. Indeed it is yet another unjustified viability “boost” where a more conservative assumption would have been more appropriate and more robust.

The reason a DCF analysis is so useful (as highlighted, with outputs, in MOC/VIA but developed more fully still in CAUSE’s viability submissions) is that it reflects the high level of uncertainty which comes with a complex, long term project where none of the land is owned at the outset. This is a point of the utmost importance with regard to viability and therefore Plan soundness.

8. In the 2019 Hyas VAU Grant scenarios: Not answered given lack of relevance for WOB

(a) Is the value of the HIF funding accurately reflected in the adjustments made to the infrastructure costs, compared with the Reference scenarios?

(b) Is it safe to assume that the HIF funding will not have to be repaid to the government?

(c) What are the implications for the 2019 Hyas VAU of the reference to “recovery and recycling” of the HIF funding in the Business Case - HIF/FF/000365/BC/01 - Tendring Colchester Borders Garden Community [EXD/054], pp152-155?

9. Is CAUSE’s critique of the 2019 Hyas VAU Inflation scenarios valid? (Section 10.0, pages 22-25 of CAUSE’s Consultation Response on EBO 86 Viability Assessment.)

Absolutely Yes. See our own comments also in MOC/VIA and in (3(j)) above.

We note also a tangible discomfort from Savills and others in their commentary regarding the use of inflation scenarios, even if they then do then include one to attempt to aid the viability narrative.

10. (a) Should the 2019 Hyas VAU have applied a benchmark land value to each of the GCs?

Yes.

We believe that Turley (for Parker Strategic Land) have written comprehensively on this topic at 2.23-2.43 of their Viability consultation submission and agree with the various points they make.

We also note the commentary in the recent CBRE paper in relation to Welborne² which further appropriately supports the point. It is unfortunate to have to note in passing that Welbourne is an acutely cautionary viability tale despite being much smaller in size than these projects.

(b) If so, what should the benchmark land value(s) be?

Everything points to £100k/acre (plus acquisition costs) being the minimum rate at which land would be expected to be brought forwards.

Given the high risk profile of the projects and referring to Harman guidance around not assuming land will come forward at the margins of viability, we would expect residual land values in appropriate viability testing to exceed £150k/acre including across a range of appropriate sensitivity analyses.

11. (a) Does any of the other viability appraisals submitted to the examination provide a more reliable assessment of the GCs' viability than the 2019 Hyas VAU?

Appendix A shows very clearly that none of the viability studies from Hyas, NEGC or developers has either used the assumptions prescribed by the Inspector (particularly contingencies and delivery rate) or provided an appropriate range of sensitivity analyses to demonstrate viability in any robust fashion.

We also note – again with reference to Appendix A - the markedly lower infrastructure spend in developer studies vs. Hyas, which further compound the lack of suitable size contingencies in improving headline viability results.

None of these viability appraisals can be considered an appropriately reliable viability assessment (or indeed anything approaching one) in the context of the Local Plan examination.

We believe that CAUSE's focus on DCF analysis and its NPV outputs (points also highlighted in our own submission MOC/VIA) merit detailed consideration given the highly problematic and risky nature of such large and long term projects undertaken without owning the land upfront.

Our own viability study (in terms of outputs) contains the sort of sensitivity analysis which Hyas needed to carry out if they were producing an appropriately robust VAU. As such, we believe these sensitivity analyses are very important for consideration. However at the same time we note for good order that the Hyas viability study has numerous flaws (many outlined in MOC/VIA and herein) such that even appropriately sensitised it remains ultimately unreliable.

² <https://modern.gov.fareham.gov.uk/documents/s23065/Appendix%20B%20-%20Welborne%20Viability%20Review%20-%20Edited.pdf>

Finally, for good order we note - as we would have done so in more detail if it had been made available for public consultation, as it should have been - that we believe NEGC's viability submission by Avison Young is problematic from a number of perspectives: finance cost, opacity of (and undoubtedly assumptions behind) CPO values, the starting date and delivery rate ignoring CPO complexities / delays, and also the fact – rightly highlighted by Carter Jonas – that CPO is unlikely to be possible where landowners and developers have their own similar proposals (i.e. all GC sites). We have contributed to CAUSE's brief summary (as an appendix to their hearing statement) regarding this Avison Young document.

(b) If so, what are the key differences in the method(s) and inputs employed in that other appraisal which make it more reliable?

See Section A regarding how critical appropriate sensitivity analysis is (and why).

Appendix A – Viability Appraisal Summary Table

Site	Hyas All	Avison Young All	GL Hearn WOB	Gerald Eve WOB	Savills CBB	CAUSE All	M O'Connell WOB
Methodology							
Key Output	Residual Land Value	IRR	Residual Land Value	Residual Land Value	Residual Land Value	Residual Land Value & DCF	Residual Land Value & DCF
DCF Carried Out?	No	No	No	No	No	Yes	Yes
DCF Discount Rate	-	-	-	-	-	Finance Cost	9.0% - 10.0% + Sensitivities
Other Analysis?	IRR Methodology Incorrect (see MOC/VIA)	- States 3.5%, but no DCF output given	IRR Details unclear	IRR Not cited in summary	IRR	-	NA
Sensitivity Analysis Included?	Limited: Contingencies Delivery Rates only at Inspector's Request	No	No	Limited: Sales Rates Build Rates	Limited: Sales Values Build Cosrs	Many: Land purchase timing; Contingencies; Finance Cost; DCF Rate;	Many: Land purchase timing; Finance Cost; DCF Rate; Delivery Rate; Contingencies; RTS; Developer Profit
Inflation Scenarios?	Yes Included as key output	Yes Uplift applied to serviced land values but not build costs (claiming land inflation > cost inflation)	Unclear	Yes	Some shown but comment "In our experience it is typically best to exclude "underlying market inflation"	No Considered unsound approach	No Considered unsound approach
Land Purchase Timing	On demand 2 years before required	Over Time Different schedule to Hyas	Over Time	Over Time	Upfront (but note comment re Interest on land)	Upfront (effectively, via DCF focus)	As per Hyas + Upfront Purchase Sensitivity
Other Notes	-	-	Detail provided is inadequate for definitive conclusions	-	-	Predominantly focuses on DCF and land purchase issues in viability context	Predominantly focuses on sensitising Hyas work
Inputs							
Delivery Rate (dpa)	300	300 - 500	350	300	354	250	250
Finance Rate (% real)	6.0%	Land - 2.5% Opex - 5.0% Infra - 3.5% "Gap" - 4.0%	6.0%	6.5%	6.0% "minimum" and "heavily dependent on market conditions"	8.0% or higher	8.0-12.0% range
Interest on Land Included?	Yes	Yes But reduced by high delivery rates and low finance rates	Unclear Detail provided is insufficient to allow comment	Apparently Yes But modelled figure very low compared to Hyas	Yes Later infrastructure phasing and high delivery drives much lower charge	Yes	Yes
Contingencies	10-40% Only on certain infrastructure	10% Infrastructure	10% Development 0% Infrastructure	5% Development 5% Infrastructure	5% Development 10% Infrastructure	40% Applied to all infrastructure	40% Sensitised to include all infrastructure + Separate RTS sensitivities
Infrastructure in Period (£m) excl. fees / contingency	WOB - 570 CBB - 977	As per Hyas	WOB - ~530 (453 scaled up for 10k vs. 8.5k homes)	WOB - ~510	CBB - 662	As per Hyas	As per Hyas + Separate RTS Sensitivities
Master Developer Profit		17.5% GDV				Believes Hyas profit figures too low	
Plot Developer Profit	17.5% GDV	6.0% GDV Afford.	20.0% GDV	18.0% GDV	~27.5% GDV		~25% GDV
Social Housing	30%	Variable	30%	30%	30%	Notes Hyas reduction in social rented and increase in shared ownership	30%
Land Value Assumptions							
Land Benchmark Value	None Only references EUV	NA	£100k	£100k - £150k References original Hyas + Troy Planning	£100k	£100k as likely most sensible reference	£100k as likely most sensible reference
Land Input Value if Relevant	-	Perceived CPO All <£100k	-	-	-	-	-

Key - WOB = West of Braintree; CBB = Colchester/Braintree Borders

Note 1. WOB infrastructure costs shown on the basis of 10K dwellings.

Note 2. While the related clarificatory submissions requested and accepted by the Inspector are generally detailed enough to allow the submission of such a table to be meaningful, we note that we cannot exclude the possibility of errors or inaccuracies in the representation of the approaches/inputs of others.