

DGA GROUP EBRIEFING AUGUST 2023



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MESSAGE FROM THE MANAGING DIRECTOR

Jim Bourke

We are now in the third quarter of our calendar year, and our business has seen a number of development and changes already this year, most recently our partnership with TSA, more about that later in this

publication.

Whilst this means lots of change, all of it positive, our Ebrief publication remains one of our 'constants', and I hope you will once again enjoy reading this edition.

Continuing with our policy of seeking to enhance the Ebrief with a valuable and informative contribution from a guest author, Inam Hasan from Walker Morris has provided some guidance on the matter of pre-contractual risks and particularly letters of intent (which are 'here to stay'), in a market where inflation is providing increased uncertainty on cost.

The first of DGA's contributions is from Gordon Aitken (Director, UK), who has looked at how the construction industry lowers its carbon footprint. This is something that is close to TSA's heart, who introduced a new business stream at the end of 2022 through their partnership with 'The Footprint Company', which manages the world's largest embodied carbon databases.

In a not unrelated topic, David Fogarty (Associate Director UK) looks at the increasing occurrence of extreme weather conditions and what this means for parties to construction contracts when they experience delays to the progress of the works, which may be related in part to such occurrences, including what published data is available and what actions may be required to support / measure such events in order to ascertain whether it is in fact 'exceptional'.

Lastly, Simon Edney (Associate Director UK) provides Part 1 of a two-part review of valuing change under the JCT form where quantities have been excluded. In his review Simon looks at how loss and expense crosse over with certain costs which may or may not be applicable to the cost of the change itself, as opposed to the more general valuation of loss and expense.

This edition also serves as a reminder of the extensive training services offered by DGA, on subject matters such as NEC and JCT, as well as the more general subject of Contractual and Commercial Awareness.

Please also watch out for our regional breakfast seminars, which are provided by Scott Milner



and serve as a solid thought-provoking start to any construction professional's day, and that isn't because of the bacon roll provided!

If you would like to discuss any of the featured topics, the wider DGA training services detailed at the end of the E-Brief, or indeed any related matter, please feel free to contact any of our office representatives.

Enjoy your read.



DEAR READER, ...

JIM BOURKE, DGA MANAGING DIRECTOR

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As some of you will be aware, a lot has happened in the world of DGA since our last Ebrief. I would therefore like to take this opportunity to reiterate the major highlights of the last 6 months.

Since the announcement of DGA's expansion of its delay and planning capabilities in the UK in the April Ebrief, with the acquisition of Chronos, as of 1st June 2023 DGA Group has formed a partnership with the Australian consultancy business TSA Management. Despite it being early days in this new relationship, the signs are very good and we continue to be confident this new venture will benefit both our clients through a wider service offering, and also allow continued growth for the DGA Group services.

Joining TSA has created value, stability and opportunity for our business and staff. The combination and diversity of our expertise, geography, clients and people will result in a business large enough to win and influence sizable global projects, while remaining agile and small enough to care and focus on our people and our clients.

With TSA, DGA staff will have the opportunity to work in new regions and sectors, and with new clients, adding to our individual and collective skills and experience. This is further enhanced by the Henry Riley business in the UK now also being part of the TSA, whose partnership with TSA coincided with our own. As a business DGA, as part of the TSA, are now able to offer a broader service to our clients.

A LITTLE ABOUT TSA MANAGEMENT:

TSA is a global project management and advisory firm with offices in the UK, Australia, New Zealand and Malaysia.



TSA is a leading presence in the Asia Pacific region, particularly in infrastructure, commercial, health and sustainability spaces. DGA joining TSA means we now have access to over 900 project experts globally and a broader array of services. www.tsamgt.com



HENRY RILEY:

Started by Henry Riley Esq in 1890, after he established a quantity surveying practice in London, the company has traded continuously ever since, growing substantially year on year. Their services focus on cost management, project management, health & safety services and project advisory services.

To compliment both TSA's existing offering and that of Henry Riley, DGA adds Expert Witness, claims & disputes, programming & delay, together with project commercial management expertise to further enhance the TSA's portfolio of services. Our team of specialists will work closely with the Henry Riley and TSA teams to build a large and diverse team that can service all sectors worldwide.

TSA CEO Andrew Wilson says, *"I'm thrilled DGA Group are on board. DGA's presence across the world helps TSA with our own strategic growth goals, as well as expanding our Contracts and Dispute Resolution expertise."*

As with every new partnership there is a period of transition and change. I will endeavor to keep you updated but do keep an eye on our social media, website and the next Ebrief publication in December.

DGA will continue to deliver the highest quality work that our clients have come to expect. I would like to thank you for your continued support of DGA, and I can assure you that whilst the whilst the integration progresses, there will be no interruption to our commitment to our clients.

I hope this news is of interest. We are looking forward to working with our new colleagues across the globe. If you would like any further information about the partnership or have any queries about your relationship with DGA please do not hesitate to contact me.

Jim Bourke jim.bourke@dga-group.com



LOWERING CONSTRUCTION'S **CARBON FOOTPRINT**

GORDON AITKEN DIRECTOR, DGA UK

INTRODUCTION

As I write this article in the middle of July 2023 the main headline news is the record temperatures currently being suffered by the Mediterranean countries and the west coast of America. The prolonged periods of this excessive heat, resultant forest fires and in other areas the torrential flooding being encountered, are being described by the United Nations and international scientific bodies as sure indicators that the maleffect of much forecasted global warming is already upon us. The targets set for reduction of greenhouse gases by several international forums over many years, and the promises made by major governments to curb their usage

of fossil fuels have not been met. Urgent action is required universally to mitigate future damage to the environment and ensure a habitable planet for our descendants.

TARGETS

Lowering the embodied carbon dioxide equivalent (embodied CO2e) of buildings is an essential response to national and global targets for carbon reduction. Embodied CO2e is the amount of greenhouse gases emitted to produce a material, product, or building. Globally, the construction industry is developing tools, databases, and practices for measuring embodied CO2e in buildings and recommending routes to reduction. It has been estimated that just three materials - concrete, steel, and aluminium - are responsible for 23% of total global emissions (most of this used in the built environment). According to the United Nations Environment Program Sustainable Buildings and Climate Initiative (2009), the building sector is responsible for 40% of global energy consumption, and 30% of anthropogenic greenhouse gas (GHG) emissions.







A slightly better number, but still a drastic number, in the UK, 25 per cent of total greenhouse gas emissions are attributable to the built environment. Greenhouse gases are emitted at every stage of the construction and use cycle, from the manufacture of materials through construction and maintenance to eventual demolition. Emissions from the built environment must be reduced if the UK is to meet net zero by 2050. Further, and more pressingly, the UK's Sixth Carbon Budget requires carbon emissions to be reduced by **78 per cent by 2035**, compared to 1990 levels. At COP26 the UK Government committed the UK to achieving a **68 per cent reduction in the UK's carbon emissions by 2030**, compared to 1990 levels. **This is only seven years away**.

MAJOR USES OF ENERGY

Rapid change in our actions is required. To effect change it is necessary to reduce the major energy uses of a building, which can be broadly identified as falling into three categories i.e., Capital Energy, Operational Energy and Transport Energy, each briefly described as follows:

- Capital Energy is that expended in the construction and subsequent demolition of the built environment. The creation of a building, although a one-off event, is estimated to equal between 10 and 30 years of Operational Energy¹. Whilst for dwellings, Operational Energy exceeds Capital Energy in about the 20th year of building life (Fay 1999: 324), it is estimated to be sooner for commercial buildings which are subject more to economic forces. Capital Energy includes building disposal, which includes the dismantling and reprocessing of materials. By investigating the amounts and types of energy used in the sourcing, manufacture, and installation of all materials in a building, it is possible to estimate the capital greenhouse gas budget.
- **Operational Energy** is all the energy used to make a building function. It is possible to assess with some accuracy the various operational energies of a building and thus the level of greenhouse gas emission.
- Transport Energy is that expended by tenants and visitors of commercial buildings which are usually accessed 5 to 7 days every week. In a city, the normal occupants of a commercial building choose a variety of means to commute to and from their workplace. The location of the building relative to the dwellings of its users leads to the quantification of the Transport Energy and consequent greenhouse gas emissions related to the use of the building.

Recent innovations and regulation have helped to reduce operational impacts, but there has been a lack of comparable methodologies, data, and regulation to the reduce embodied impacts. In 2011 and 2012 the <u>European Standards</u> Committee moved towards addressing this in publishing the TC350 standards¹¹ to **define the stages** which should be included for the



whole <u>life-cycle impact assessment</u> of buildings. The committee was developed to standardise methods for the assessment of sustainability aspects in construction works in the context of the UN Sustainable Development Goals.

THE FOOTPRINT COMPANY

As you may be aware DGA was recently acquired by TSA Management, an international project management and advisory consultancy. Previously, TSA acquired "The Footprint Company" to offer carbon management services. In the wake of the TC350 standards, The Footprint



Company set up and manages one of the world's largest embodied carbon databases (The Green Book- one of the largest and most complete databases covering materials, assemblies, and projects, drawing from nearly 2,000 real case studies) and has developed proprietary carbon management tools including "The Footprint Calculator", an embodied carbon calculation tool. The Footprint Company supports clients to deliver net zero carbon while providing the data sets and carbon calculation tools to reduce the cost and complexity of embodied carbon project design.

In conjunction with The Footprint Company, DGA, alongside our sister company Henry Riley Associates, undertake the following:

• Feasibility and initial Design

Benchmark to inform scale and performance targets. Establish initial upfront carbon impact and provide overall offset feasibility strategies and ratings guidance.

Concept and Design Development

Engage with design team and support major pathway design iterations providing specific carbon estimates and mitigation outcomes- monitor against targets and benchmarks. Specific carbon mitigation performance metrics for contract delivery.

Tender and contract documentation

Prepare performance related contract deliverables for Tender. Tender assessment and peer reviews. Update carbon estimates and or validate tender proposals and support integration into contract deliverables.

Construction and validation

Support contractors to embed and deliver carbon targets through procurement and guide continuous validation to as-built.



Builders' operation and CAPEX

Undertake carbon assessment of property operations and advise on mitigation pathways. Benchmark and performance improvement strategy for capital works.

Portfolio and Asset Net Zero Management

Define strategic portfolio or asset carbon management and reduction plans providing planned pathways to achieve Net Zero and or commitments within declared timeframes.

Impact across project life

Once we have delivered carbon savings through the design and construction phase, we can develop net-zero options through the occupation stage.

Further information on the services offered by "The Footprint Company" can be found at <u>https://footprintcompany.com/</u>

THE COST OF SUSTAINABILITY

Most construction professionals will be aware there is an exponential growth in interest amongst clients, contractors, and their supply chain in reducing their carbon footprint. Not only do we have a moral obligation to the future of our planet, but proof of such action is also becoming an imperative for pre-qualification on many tender lists, and end-using clients want to advertise to a very concerned and interested public that their carbon footprint has been mitigated as much as possible.

But how much does this mitigation cost? i.e., do sustainable buildings cost more to build and maintain?

A recent reportⁱⁱⁱ demonstrated that sustainable construction, when compared to regular methods, brings a very small increase in upfront costs. However, this marginal increase of about 2% would, on average, pay for itself, with a life cycle saving of 20% of total construction costs, more than ten times the initial investment.

This is where the ongoing operation and maintenance costs of sustainable buildings really shine. A building of this nature will inevitably implement green measures such as:





- Efficient use of energy, water, and other resources
- Use of renewable energy, such as solar energy
- Pollution and waste reduction measures, and the enabling of re-use and recycling.

In doing so, significant cost savings are achieved by lessening the carbon footprint and reliance on natural resources, in turn making the building a net producer, rather than a net consumer of resources. Statistically, green buildings on average, are 14% less costly to operate than their traditional counterparts^{iv}.

So, to answer the question of: "Do sustainable buildings cost more?" The answer is overwhelmingly that it can (but often, it doesn't) and any additional costs more than pay themselves in the cost savings made through green operational practices like those mentioned above. Furthermore, there are other financial benefits of green buildings such as a higher asset value, rental income, occupancy rate, and productivity. Beyond financial returns, it has been found that a green building has health benefits for occupants. Green buildings have better air quality – e.g., materials that are not off gassing – and stimulate occupants to move, e.g. via accessible staircases.

There will always be those who do not believe in the need for sustainable or green measures in their buildings. However, as those measures become more mainstream, we anticipate there to be a societal tipping point, in which those who haven't acted will be spurred into doing so. At that point, the cost of inaction will quickly reveal itself, as in all likelihood, retrofitting existing buildings with green and sustainable measures will undoubtedly cost more than had they been handled from the outset. This will result in higher costs, and a lower chance of recouping those losses through the remaining life cycle of the buildings.

Notwithstanding the overall life cycle savings of green buildings, a current significant additional cost is the cost of design and longer construction times. Recent research shows that on average it can cost 5 per cent more on design fees and green building construction also takes 11 per cent longer than construction of a conventional building of comparable size. However, over time, learning and competition should eventually drive down both design costs and the longer construction time. Green construction is still novel.

Building costs also vary by green certification level. Recent research studied buildings certified through <u>BREEAM</u>, the most widely adopted environmental certification system for buildings in the UK. Like many green building certifications, the BREEAM program has multiple levels, from Pass to Outstanding.





Most green buildings in the UK – 82 per cent – are rated either BREEAM Very Good or Excellent. These are 5-19 per cent costlier to construct than non-certified projects ^v. By contrast, buildings at the lowest levels of BREEAM green certification (Good and Pass) have no environmental cost premium. The "green premium" that certified buildings can achieve increases with the certification level.

Notwithstanding the aforementioned marginal additional upfront

costs, the major driver of sustainable buildings now are investment companies and pension funds. Simply put, if there are two buildings and one is more sustainable/environmentally friendly, that building gets the investment. This will only increase in the future.

THE GREEN FUTURE FOR THE CONSTRUCTION INDUSTRY

So, regarding the foregoing there is an imperative need to construct sustainably and it cannot be left to the whim of clients, contractors, or their supply chain to perform. Statutes have been passed and building regulations altered and expanded, and further will be required to ensure the construction footprint is minimised and completed buildings are operated as energy efficiently as possible with minimal green-house gas production. Measurement of embodied carbon is critical in this process.

The government is starting to listen to those voicing construction carbon concerns. Michael Gove recently shut down Marks & Spencer's Marble Arch demolition plans citing concern over carbon. Marks & Spencer sought to demolish an existing building in Oxford Street, London and construct a new 10 storey retail and office scheme. In his decision letter, Gove said he disagreed with M&S's argument that there was no viable and deliverable alternative to demolition, arguing that the project



was not compatible with the transition to a low-carbon future and the need to reuse existing buildings and materials. Campaigners said the loss of the carbon emissions "embodied" in the building itself – from the energy used to create and transport the materials – gave it a significantly larger environmental footprint than a "retrofit" that would preserve parts of the



structure. In the absence of specific government policy on embodied emissions, the ruling is likely to be seen as a precedent for developers and planners in how to approach the question of whether to demolish or refit buildings. The Gove planning decision may have a significant effect on future planning applications and approvals.

As stated above, "The Footprint Company" (a DGA associated company) produces, and relies on, "The Green Book"- one of the largest and most complete data bases of embodied carbon .^{vi} Analysis, recording and production of this data produces an essential tool in mitigating greenhouse gas emissions. May I suggest that there should be a contractual requirement upon designers in their professional appointments, and contractors and suppliers in their respective contracts, to provide data relating to specific sustainability matters. The data that should be provided could include schedules identifying:

- 1. When components are likely to require replacement and financial modelling of costs,
- 2. Anticipated consumption and costs of utilities during occupation, and
- 3. Total carbon performance at construction stage, during the life of the building and at the end of the building's life.
- 4. A post occupancy review by the project team to check on targets and to facilitate better performance on subsequent projects.

Standard forms of contract will be required to do more to address lifecycle matters, and a contractual commitment by all parties to a common approach at the earliest stage would facilitate the transfer of information and the alignment of stakeholder interests across a project. Standard forms of contract can assist to achieve sustainable objectives and if they addressed the performance of the completed works then they could be made legally binding. A form of contract, which applied throughout the design and construction phases and into the occupation of the completed works, would facilitate achieving a more sustainable building and more sustainable approach to the procurement of buildings. Further provisions could be incorporated within contracts to encourage performance outcomes during the design and construction phases. Some of these could be as follows:

- Payment against key performance indicators on mitigation of carbon emissions.
- Payments based upon the taking of specific steps intended to maximise sustainability.
- Payment of liquidated damages in the event the completed works failed to meet a particular standard of carbon emission.
- Payment of a bonus if the completed works exceed a particular standard.



- Extended defect correction period for operational elements of the works
- Make the Contractor (Specialist Contractor) responsible for the maintenance of key elements including M & E services during the occupation of the building for an initial minimum say 3-year contract period.
- Have the contractor provide training and advice to a facilities manager before and in the months following practical completion?
- Ensure that the lifecycle strategy is required to form a key component of the building manual, and that there is a requirement for a handover meeting on the topic between the contractor, client, and operator (when available) post PC.

The standard forms are answering the call for sustainability already. NEC 4 recently introduced an additional Optional X Clause X29: Climate Change. On 10 August 2022 my colleague Brendan Robinson published an interesting e-brief article titled "How does NEC deal with global climate change?" This can be found at http://www.dga-group.com/the-reading-room.

Likewise, JCT has Supplemental Provision 8 and Supplemental Provision 9, which can be used to effect more sustainable construction.

It has been argued that the above suggested imposed requirements are very prescriptive, and that more flexibility is required to enable client priorities to be met and that it requires a more collaborative approach, that aligns the supply chain and encourages innovation, so contracts that do this are what is required, not prescriptive clauses dictating specific measures. It is ultimately for the client organisation to determine what approach it wishes to adopt. The client's commitment and early involvement of the supply chain are, however, essential to achieve sustainability and reflect lifecycle costs both in the design and construction process.

The entire construction team – client down to subcontractors – need to buy into sustainability completely. Education is key, but until more organisations and clients are adequately educated on sustainability issues, perhaps in the short term the carrot and stick approach could work to focus the minds and will hopefully lead to questions being asked internally which lead to self-education - and that learning process requires to start now - or it may be too late!

Endnotes

- i. https://www.arcom.ac.uk/-docs/proceedings/ar2002-129-136_Aye_et_al.pdf
- ii. CEN TC350 Standards for Assessing Sustainability; EN 15942:2022
- iii. https://www.fastbuildsupplies.co.uk/knowledge-hub/benefits-sustainable-construction-materialspractices/#:~:text=However%2C%20when%20compared%20to%20traditional,of%20the%20total%20 construction%20cost.; 2022
- iv. https://www.bdcnetwork.com/blog/green-buildings-dont-have-cost-more#:[~]:text=Green%20buildings%2C%20 on%20average%2C%20are,is%20doubling%20every%20three%20years.
- v. https://nbs.net/green-building-has-a-strong-business-case/#:~:text=Most%20green%20buildings%20in%20 the,have%20no%20environmental%20cost%20premium.
- vi. https://footprintcompany.com/the-greenbook/



HOT WEATHER AND DELAY – WHAT'S MY ENTITLEMENT?

DAVID FOGARTY ASSOCIATE DIRECTOR, DGA UK



Within the construction industry, it is not unusual for inclement weather conditions to cause delays and/or disruption. This invariably opens the 'floodgates' for claims, and in our experience, it is often a much-debated subject in dispute resolution.



To that end, it is typical for parties to reach a prior agreement as to who bears the contractual risk for any delays caused by bad or extreme weather conditions. However, in the absence of reaching any agreement in advance, it is generally trite law that the Contractor would be responsible for any delay to the project because of inclement weather.

As such, any entitlement to an extension of time will rest on the express terms of the contract. For example, the JCT Design and Build Contract 2016 identifies "exceptionally adverse weather conditions" as a "Relevant Event" (under Clause 2.26). However, it is worth noting that adverse weather conditions are not listed as a Relevant Matter, and thus the risk is shared between the parties in that the contractor will benefit from an extension of time but will not be able to recover the loss and expense inevitably associated.



Yet, there still remains a lack of consistency amongst construction practitioners as to what exactly what is meant by "exceptionally adverse" and how any consequent delay is to be calculated. The JCT, for instance, does not go further to explain or define the word 'exceptional', nor does it provide the Contract Administrator with an appropriate threshold to measure the delay. It is unsurprising, therefore, that weather disputes can be a subjective judgement and, as a result, continue to be contentious and hotly debated.

Here in the UK, we often associate weather claims with severe wintery conditions, such as rain, snow, ground frost, below-zero temperatures, and the like. Nevertheless, as we are on the cusp of the UK summer holidays, the recent hot weather has sought to remind us that adverse weather claims can occur at the other end of the meteorological spectrum. The Met Office informs us that the average temperature is up by almost a degree in the past 30 years, and hours of sunshine are up 5.6%.

It was only last year that the UK saw its hottest temperature on record (with an official high of 40.3 degrees). While it is typical for construction operations to adapt their working practices in accordance with the Construction (Design and Management) Regulations 2015, we have also seen that the high temperatures can impact upon the physical site works.

By way of example, we were involved in a dispute regarding the slow progress of one of the main pile caps on a power infrastructure scheme in Bedfordshire. The Subcontractor realised that the unusually high temperatures caused several earlier (and much smaller) foundations to cure at a faster rate than expected. This was later confirmed in the cube tests, in which the concrete failed to achieve the desired strength, and as such, the subcontractor was required to undertake

remedial works. Given the risk to the upcoming and larger pile caps, the subcontractor proactively sought to revise the concrete composition by retarders introducing into the mixture (which slows down the chemical process in order to overcome the accelerating effect of the high temperatures).





In the end, the subcontractor managed to settle its final account. Nevertheless, it served as a reminder that exceptionally hot weather can equally delay and disrupt construction projects.

PRACTICAL POINTS TO TAKEAWAY

This type of scenario is likely to become more frequent, with the Met Office predicting that climate change is continuing to influence the likelihood of extreme weather. With that in mind, what should you do if you need to prove you were delayed or disrupted?

- **Firstly**, a party will face an uphill battle if it has not kept sufficient records. Not only the weather data to demonstrate that conditions were "exceptionally adverse" (or whatever test or threshold is set out in a particular form of contract) but also its impact on construction site operations. To that end, a good starting point is often the Met Office downtime records.
- **Secondly**, ensure compliance with the notice provisions under the contract and, if possible, notify potential delays around the time of the event. Although, it is unlikely that local weather stations will be able to provide real-time data, and therefore the parties may have to adopt a wait and see approach (until the relevant weather records are available).
- **Thirdly**, it is not simply enough to show that the weather encountered was, in fact, "exceptional". A Contractor must also show that the exceptional weather resulted in a delay (or a likely delay) to the progress of the works that then impacted the completion date for the project. This generally requires some form of critical path analysis to demonstrate cause and effect.

While weather related disputes tend to focus on wind, rain, and the like, I hope that this article sheds some light on the fact that adverse weather is not only confined to the winter months. Accordingly, the evidence seems to suggest that extreme climate events will increase. As such, weather-related disputes at either end of the spectrum are likely to remain prevalent.



PART 1: VALUING CHANGE UNDER JCT STANDARD BUILDING CONTRACT WITHOUT QUANTITIES 2016

SIMON EDNEY ASSOCIATE DIRECTOR, DGA UK



In the first of this two-part piece, Simon Edney explores the Valuation Rules contained within the JCT Standard Building Contract Without Quantities 2016 and asks: when do prelims become loss and expense?

VALUING CHANGE UNDER THE JCT STANDARD BUILDING CONTRACT WITHOUT QUANTITIES 2016 – PART 1



Many of us would consider loss and expense as being one of the hardest, and usually the last, parts of the project account to be wrapped up and agreed.

One good reason for this is that whilst under the JCT suite of contracts the contractor is generally able to forecast for *"amounts likely to be incurred"*, they are also required to regularly update these forecasts and provide *actual*

costs in order for the Architect / Contract Administrator / Quantity Surveyor (herein referred to as the **"Contract Administrator"**) to ascertain the amount of loss and expense "incurred".

Actual cost demonstration (as opposed to using the contract rates and prices) is necessary because loss and expense claims are essentially 'damages' for breaches of contract, the aim of which is to put the injured party back into the position it would have been in had the contract been performed.

This process can take a lot of the parties' time and effort to conclude.

You also need to deal with the age-old question of whether *overheads and profit* are permissible within a loss and expense claim, and what level of evidence is necessary to ascertain the amount of loss and expense incurred.



Compare this to the valuation of a Variation where the Contractor's valuation is discussed with the Contract Administrator and (in theory) agreed soon after; the advantages of pricing a Variation, as opposed to loss and expense, therefore are numerous - but it's not always possible...

Working as a Contractor's QS, and then later as a Commercial Manager, I've had plenty of experience trying (often unsuccessfully) to persuade the Contract Administrator that I should be allowed to include the proverbial kitchen sink within the valuation of a Variation. The CA's responses were often the same: *"why should I pay for the Site Manager when he's already covered under the prelims?"* and *"your prolongation forecasts seem high, let's wait and see what happens..."*.

Later in life, as an advisor to both employers and contractors, I've offered similar arguments in response to variation claims; striking out items from the assessment because they should be included in the *"loss and expense account"*, for example, or denying claims for profit and/or overheads on prolongation costs.

We've all heard the arguments for and against, but when a Variation occurs, what should happen?

And with specific reference to the **JCT Standard Building Contract Without Quantities 2016** (the "*the JCT Contract*"), what does the contract actually tell us about what is permissible when assessing Variations?

HOW DOES THE JCT SBC ENVISAGE THE VALUATION OF CHANGE?

BY AGREEMENT

It's an often-overlooked fact but, as confirmed by clause 5.2.1, the parties are free to agree to anything they like – absolutely anything. And quite frankly, they should! The benefits of agreeing a figure early on include cost / value certainty for both contractor and employer, less management time and effort spent reviewing long lists of unagreed variations, and, potentially, improved relationships as a result of not having to repeatedly argue over relatively small sums of money.





The NEC4 has a similar mechanism for agreement in the form of clause 63.2 whereby, if the Project Manager and the Contractor agree, *"rates or lump sums"* may be used to assess change but, as with 5.2.1, I've rarely seen this clause put to good use.

(i) SCHEDULE 2 QUOTATIONS AND CONFIRMED ACCEPTANCE

If an agreement is not possible, then the Contract Administrator has the ability to request a formal *Quotation* in accordance with Schedule 2 (clause 5.3.1).

Schedule 2 says that the Contractor can include, separately, for the following cost items:

- The effects of complying with the instruction, by reference, where possible, to the rates and prices contained within the Priced Document, including, "where appropriate", allowances for any adjustment of preliminary items (clause 1.2.1),
- Any adjustment, or extensions of time, for completion of the Works (clause 1.2.2),
- Amounts for direct loss and/or expense not included elsewhere (clause 1.2.3) and
- The reasonable costs of preparing the quotation (clause 1.2.4) more on this to come...

So, Schedule 2 allows the Contractor to consider all the cost elements within its quotation which could be incurred as a result of the Variation, up front. But, despite having this facility, in my experience Schedule 2 is rarely used and, when it is, is not implemented in the way that the Contract envisages. This is a missed opportunity for both parties in my opinion.

If the Schedule 2 Quotation mechanism isn't used, the Contractor refuses to provide a Quotation or the parties fail to agree a price for any Variation, it then falls to the final option: *Valuation* under the *Valuation Rules*.

VALUATION RULES

The Valuation rules are intended to provide guidance to the CA to value Variations during the currency of a project, but they're also adopted when issues become contentious, and a change is being valued in an adjudication or other tribunal.

Clause 5.6 of the JCT Contract states that, to the extent that a Valuation relates to additional work that can properly be valued by measurement, such work *shall* be valued in accordance with the Valuation Rules. These rules are summarised as follows:



Jules

- Where work is of a similar character and doesn't significantly change the quantity, the rates and prices for the work set out in the Priced Document should be used (clause 5.6.1.1)
- Where work is of a similar character but is not executed under similar conditions, or the Variation significantly changes the quantities, the rates and prices set out in the Contract Documents shall be the basis for determining the valuation and shall include a **fair allowance** for such difference (clause 5.6.1.1)
 - As an example, if the work is now being carried out during winter months, it may be appropriate to allow for reduced daylight hours or less favourable weather conditions.
- • Where the additional work is not of similar character, the work shall be valued at *"fair rates and prices"* (clause 5.6.1.2)
 - The definition of "fair rates and prices" has been the subject of considerable legal debate, with various positions being adopted for different situations. Should profit be included? Should the valuation be based on actual cost? The answer will be determined according to the facts and the circumstances of each individual case.
- Where the additional work cannot be valued in accordance with clause 5.6 of 5.8, as applicable, the Valuation shall comprise dayworks (clause 5.7)
 - You can find a fantastic article on verified and unverified timesheets within DGA's online 'Reading Room' resource centre at <u>Only a matter of Time[sheets]</u>
- Where a Variation affects the conditions under which *other work* is executed, then the other work shall be treated as a Variation and valued in accordance with the Valuation Rules (clause 5.9)

And finally,

- If the Valuation applies to work that:
 - Isn't addition or omission and
 - Isn't substituted work and
 - Can't be valued under any of the Valuation rules above,

then a *fair* valuation shall be made (clause 5.10)

• The types of costs that might be included here could be hyper-inflation or goods and services affected by a war in Europe, perhaps? The lines between these types



of issues and what may be deemed a force majeure are unclear. Regardless, this rule is essentially a *catch-all* for anything else that might not be captured within the other rules.

OVERHEADS AND PROFIT

The subject of overheads and profit (**"oh&p"**) could easily justify an article all of its own, and it's fair to say that the individual context and facts behind each and every Variation will dictate how and when oh&p can, and should, be applied.

Suffice to say that the concept of a "fair" valuation would, according to the RICS, also indicate the inclusion of an allowance for oh&p in line with that included within the Priced Document.

Interestingly, NRM2 also confirms that overheads and profit should be applied to not only the usual preliminaries, measured work and work resulting from the expenditure of provisional sums, but also to risk allowances. This should assist the next time you're having a debate about whether to include risk 'below the line'.

VALUATION OF PRELIMINARIES

In terms of the inclusion of Preliminaries, clause 5.6.3 of the JCT Contract confirms that the valuation of Measurable Work shall allow for *"any addition to or reduction of preliminary items of the type referred to in the Measurement Rules"*.

The Measurement Rules are confirmed under clause 1.1 as the RICS' New Rules of Measurement - Detailed Measurement for Building Works (the "*NRM2*").

Within its usefully appended pricing schedules, NRM2 provides a detailed list of preliminaries which the contractor may price. These items include management and staff, site accommodation, services and facilities, mechanical plant, and temporary works items. Arguably, therefore, the preliminaries element of the valuation might also include the existing site team's cost of pricing and coordinating the Variation.

So, it seems pretty clear: any Variation under the JCT Contract can be valued in accordance with rates and measures, or on a fair and reasonable basis, and can include preliminaries and oh&p.

This begs the question of where loss and expense comes into play?



WHY USE LOSS AND EXPENSE?

In answer to the question; "When does Loss & Expense apply?", the RICS says :

"There are many tools on the quantity surveyor's work bench for valuing all sorts of changes to work... If these tools are used properly, and to their full extent, there are likely to be limited occasions where the contractor needs to seek ascertainment of Loss & Expense."

This is where things start to become murky. It could clearly be argued that, if the contractor and quantity surveyor used the JCT's tools correctly, and priced preliminaries in with the Variation, then there would be no need for a loss and expense account at all.

Or would there?

What about losses arising from other Relevant Matters?

What about delays to the regular progress of the works?

What about staff thickening?

The answers to these questions are far from clear but I will attempt to answer them in the next edition of EBrief, due to be released in December 2023.



"CLEAR INTENTIONS – PRE-CONTRACTUAL RISKS AND LETTERS OF INTENT"

INAM HASAN ASSOCIATE, WALKER MORRIS



Navigating through the pre-contractual stage of a development is a tricky task. The use of letters of intent as a tool to enable parties to act pending formal legal documentation can be beneficial. In these circumstances, however, risk management is paramount to prevent parties falling into pitfalls prior to completion of the main building contract.

In an economic climate of high and 'sticky' inflation, letters of intent are increasingly popular. Allowing a contractor to mobilise before the parties enter into the proposed final contract is, of course, often very advantageous. With costs spiralling and materials scarce, securing lower costs and placing supply chain orders in advance is a necessity for developers, particularly when faced with a strict budget and an immoveable completion date. Letters of intent play an indispensable role in this regard and will continue to be a common feature in the construction industry.

But what are the risks, and how can parties manage them?

PRE-CONTRACTUAL COMMUNICATIONS

When a dispute arises, parties often seek to rely on communications made at the precontractual stage as evidence of their intentions and of their interpretation of subsequent contractual provisions. However, one key difficulty arises in relation to what pre-contractual communication, if any, is admissible.

Case law provides that whilst communications in the pre-contractual stage will be admissible for the purposes of understanding a contract's commercial aims and its provenance, such communications cannot be used to aid the interpretation of specific contractual provisions. This distinction is crucial.

Whilst the rule may appear to kill pragmaticism and seem unhelpful, the reality is that, without it, parties would be faced with a prospect where every contentious provision could be fought over on its interpretation. That would be unfeasible, inevitably leading to further practical difficulty and uncertainty.



Another key difficulty arises as to whether and/or when pre-contractual negotiations, communications and documentation themselves become contractually binding. It is often assumed that pre-contract negotiations are not legally binding. However, because (with limited exceptions) contracts can come into effect without any formality or written documentation whatsoever, if not correctly managed, pre-contractual communications or documents can result in a contract being formed inadvertently or at an earlier stage than intended. Parties can, therefore, become contractually bound to terms, obligations and liabilities to which they might never otherwise agree. In *Pretoria Energy v Blankney Estates (2022)*, one party believed that a 'heads of terms' document (tantamount, in law, to a 'letter of intent') was binding. The other did not. A £56.4 million claim ensued, the outcome of which turned solely upon which of those differing understandings was correct.

It is therefore essential for parties to know how to conduct negotiations, and how to exchange pre-contract communications and documents, without unintentionally becoming bound to unacceptable terms. The longstanding answer has been, and remains, to outline expectations in a letter of intent. However, to guard against such risks, it's vital to ensure that any such letter is properly drafted.



HOW RISKY?

When proceeding with a letter of intent, it is paramount to understand that the consequences of poor drafting can be very costly. The case of *Arcadis Consulting (UK) Ltd v AMEC BCS Ltd (2018)* is a prime example. It concerned a pre-contractual agreement between a specialist concrete sub-contractor and a consultant designer in respect of two large construction projects. The parties commenced works and put into place a letter of intent while they conducted negotiations on a construction contract that never materialised. Unfortunately, the letter of intent was not clearly drafted – neither as to its legal status and force, nor as to its terms.

To the intense dismay of one of the parties, the letter of intent was ultimately found, by the Court of Appeal, to constitute a contractual offer, which was then accepted by exchange of correspondence and by conduct when the works began. Not only was that party therefore inadvertently landed with a binding contract per se, but it was also bound by terms



contained within what it had thought was merely a non-binding letter of intent. One of those terms was a liability cap of just £610k. This proved disastrous for one party's damages claim when issues in the works arose and it faced a potential loss of £40m.

MANAGING THE RISKS

So, if a letter of intent is to be used, what is the best approach?

Firstly, both parties should clarify, at the outset of negotiations, the point at which they will become contractually bound. If discussions are never intended, by either party, to result in a binding oral contract, that should be recorded and all negotiations/discussions/ communications should be marked 'subject to contract'. The same applies when it comes to the letter of intent. Do the parties intend the letter of intent to have contractual force pending completion of the final contract, or not? Either way, the point should be expressly confirmed, and negotiations should be conducted, and the letter itself should be drafted, accordingly.

Secondly, the purpose of a letter of intent must be understood. Letters of intent should always be viewed as an interim measure only; they are not a panacea which will engage a contractor for a project's entirety. Their function, rather, is to serve as a 'stopgap', allowing work to commence whilst the parties finalise the details of the main contract. The main contract will ultimately supersede the letter of intent.

It's also worth reviewing the contractor's proposed scope of activities, as this can determine whether a letter of intent is the right pre-contract tool. It's common practice for contractors to have much earlier engagement on a project and to advise on the design and buildability of the works as part of a 'two-stage' tendering/procurement process. A letter of intent is to allow works to commence whilst the building contract is formalised. So, if the design or scope of the works is still to be determined, a pre-construction services agreement is likely to be more suitable.

To avoid the mistake made in *Arcadis*, parties need to understand what is being signed up to. There is extensive case law which shows that the courts will prioritise consideration of the language usedⁱ and interpret accordingly. Clear drafting is therefore vital. Moreover, sometimes calling the letter a "letter of intent" is part of the problem, as the name itself can be misleading. The opening paragraph typically found in such letters will refer to future intention. This is unhelpful as it diverts attention away from the fact that the letter itself usually constitutes a contract which (subject to the drafting and the conduct of any earlier discussions!)



i i.e. as opposed to the parties' intentions, wider circumstances, commercial common sense, etc. These other factors are generally only taken into account when there's genuine ambiguity in the contractual wording.

is binding on the parties. For this reason, it may be preferrable to refer to the letter as an "early engagement letter" and to include reference, in the letter itself, to it being a "preliminary contract". These simple changes can help parties keep a fix on the key issues handled in the agreement and allow them to focus on understanding their obligations.

The nature and value of the works being procured through the letter should be considered, with appropriate clauses drafted into its terms. It's necessary to distinguish between authorising £25,000 for pre-contract design and doing the same for £250,000 of on-site work. Although both fall under the Construction Act's remit, high-value works should always include an express mechanism for valuation of the works, facilitating interim payments and the obligation to maintain relevant insurance.

Other notable key provisions which a good early engagement letter should include or take into consideration are:

- An agreed scope of the preliminary works to be carried out under the letter, with a breakdown for the costs attributed to each service/activity
- Clarification that no other works are to be carried out until the main building contract is completed (and therefore no other payments are to be made until such time)
- A maximum expenditure cap on the amount to be paid for the preliminary works
- Query whether the Construction (Design and Management) Regulations 2015 are engaged
- Termination rights for the "Employer" and what happens if the building contract isn't entered into following termination
- Query whether ownership of advanced goods or materials need to be considered
- Confirmation that the letter is to be superseded by the final contract.

IN SHORT: A USEFUL PRE-CONTRACTUAL SOLUTION, BUT USE WITH CARE

Whilst there is ultimately no substitute for progressing works pursuant to the final building contract, the reality is that parties will frequently wish to 'crack on' with the works at a much earlier stage. As such, letters of intent, are here to stay.

An understanding of how contracts can be formed, and the status and admissibility of precontractual communications; combined with the careful conduct of negotiations and the precise, comprehensive drafting of letters of intent, should enable developers to mitigate the risks associated with carrying out works prior to completion of the main contract.



COMPLIMENTARY BREAKFAST SEMINAR

GETTING PAID

"SMASH & GRAB ADJUDICATION" – IS IT AS EASY AS THEY SAY?

About the Seminar

Having lectured on a national and regional level for a number of years <u>Scott Milner</u> is known for his informative topical seminars. Scott returns in October 2023 with a complimentary breakfast seminar concerning problems faced by parties in applying for and seeking recovery of payment via Adjudication.

This seminar will appeal to **Contractors** and **Subcontractors** that want to gain an up to date understanding of the requirements and arguments in relation to payment notices, pay less notices and payment; and improve their prospects of recovery of payment under JCT and NEC Engineering & Construction Contracts and Sub-Contracts.

In this seminar, we consider:

- The importance of an effective application for payment/ default payment notice.
- The ingredients of a valid application for payment or notice of intention to pay less.
- The danger of multiple applications for payment for the same due date.
- Can a late application for payment operate as a default payee notice (following ISG Retail Limited -v-FK Construction Limited [2023] EWHC 2012)?
- Can an Employer commence a 'true value' adjudication when there is already an ongoing 'smash and grab' adjudication (following Henry Construction Projects Limited -v- Alu-Fix (UK) Limited [2023] EWHC 2010)?
- Does a smash and grab adjudication in relation to an interim payment notice take precedence over the purported true value in a final certificate?
- We can refer a dispute at 'any time' according to s.108 of the HGCRA. Can a true value adjudication be commenced at any time (following AM Construction Limited v The Darul Amaan Trust [2022] EWHC 1478)?

To book your place please click here >>

Breakfast & registration opens at 8am

Due to high demand for our seminars, the invitation is for Contractors and Subcontractors and we are at this time limiting the number of delegates per firm / organisation to 2.





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Due to DGA's expertise in the provision of contractual advice, commercial and programming services, and dispute resolution across all construction industry sectors, we have created educational training seminars on the understanding and administration of the various forms of construction contracts.

Our highly experienced course presenters are able to apply the contract to the day to day tasks and problems encountered by the delegates.

Our in-house training seminars are provided for a fixed fee at your chosen venue. The benefit of this is the ability to choose the number, position type, and experience of delegates who attend without a price increase. We appreciate that workload and training is a fine balance and, therefore, our in-house seminars minimise disruption to the delegates duties that can occur with public seminars.

NEC3 & NEC4

UNDERSTANDING AND USING THE NEC3 ENGINEERING AND CONSTRUCTION CONTRACT

FULL DAY SEMINAR

This training seminar is aimed at novice through to professionals with experience of the NEC3 ECC:

• Introduction – The agreement

Contract Data 1 and 2, Risk Register, Site Information, Works Information, Activity Schedule , Main Options, Secondary Options, Z Clauses, precedence of documents.

• Providing the Works

Mutual trust & co-operation, Communication, Early Warning notifications, Works Information, Design, Instructions.

Quality

Defects, Defect correction, access given/ not given, assessment of cost of correction.

• Time obligations & Programming

Start Date, Access Date, Key Dates, planned Completion, Completion Date, float, Accepted



Programme, Revised programme, Acceleration.

• Payment

Activity Schedule, Price for Work Done to Date, Applications for payment, Project Manager's assessment.

• Compensation events

Significance of Early Warning notice, notification of compensation events, time barring late notification, an overview of the assessment of the change to the Prices and/or delay (calculation of Defined Cost, Shorter or Full Schedule of Cost Components), dividing date, quotations, rejection of quotations, Project Manager's assessment, implementation.

UNDERSTANDING AND USING THE NEC4 ENGINEERING AND CONSTRUCTION CONTRACT

FULL DAY SEMINAR

The NEC4 seminar will follow the NEC3 training (above) format while incorporating the changes in the new NEC4 edition.

NEC3 TO NEC4 ENGINEERING AND CONSTRUCTION CONTRACT – THE CHANGES AND IMPLICATIONS

HALF DAY SEMINAR

This training is an ideal follow on from the Understanding & Using the NEC3 Engineering and Construction Contract. Best suited to professionals with experience of the NEC3 ECC as it solely considers the changes and the impacts from the NEC3 ECC to the NEC4 ECC:

- Why a new edition?
- New terminology
- New clauses
- Amendments to clauses of the NEC3 ECC
- Amendments to Schedules of Cost Components
- Questions

NEC3/ 4 ECC COMPENSATION EVENTS: THE EVENTS, NOTIFICATION & ASSESSMENT

HALF DAY

This seminar considers all of the events that are compensation events, which party is liable to



notify the event, the mechanism for notification and assessment in more detail. The delegates will receive training in correctly assessing and submitting quotations for compensation events.

FULL DAY SEMINAR

As above plus workshop

TERM SERVICE CONTRACTS

FULL DAY SEMINAR

Much like the Understanding and Using seminars (above), this considers the Term Service Contract, looking at Contract Data, works information and providing the service itself.

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FULL DAY SEMINARS

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FULL DAY SEMINAR

In this seminar, we consider issues commonly encountered during the course of a contract, including but not limited to, formation of contract, deeds, letters of intent, changes to the terms and the scope of works, authority, design liability, records and notification of events, claims for delay, loss and/or expense or damages, payment, liquidated damages, time bar clauses, exclusive remedy provisions, termination and repudiation.

WHAT TO DO NEXT?

For more information about our training seminars, please email scott.milner@dga-group.com; or telephone 0113 337 2174

Terms & Conditions apply



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