

JCT NEWS

THE JCT CONTRACTS UPDATE FOR THE CONSTRUCTION PROFESSIONAL

BUNHILL 2 ENERGY CENTRE

The Bunhill 2 Energy Centre, situated on the long-disused site of the old City Road underground station in Islington, is the second phase of Islington Borough Council's Bunhill Heat and Power District Heating Network, launched in 2012. The innovative project uses waste heat from the Tube to provide sustainable, cheap heating and hot water to homes and other buildings in the borough. A JCT Design and Build Contract provided the contract solution.

The Bunhill Heat and Power District Heating Network was supplying heating and hot water to 800 homes and two leisure centres, Ironmonger Row Baths and Finsbury Leisure Centre. The completion of the Bunhill 2 Energy Centre enables the addition of a further 550 homes and Moreland Primary School. The combined total of 1,350 homes, two leisure centres and a school has the potential to upgrade to 2,200 homes in future.

Islington Borough Council's aims for the Network were to supply the cheapest, greenest heat possible, in order to cut overall emissions in the borough, and reduce residents' energy bills at a time when living costs are on the rise. The Bunhill 2 Energy Centre achieves this by capturing heat from an industrial source that would otherwise be wasted and uses it to heat homes in a way that is cheaper and more sustainable.

The Greater London Authority estimates there is enough wasted heat in London to meet 38 per cent of the city's heating demand. By expanding district heating networks such as Bunhill this could rise to 63 per cent of demand by 2050.



Image: Paul Rafferty

Bunhill 2 Energy Centre

In choosing the site of the Centre, it was determined that 18-28°C air was being exhausted into the atmosphere from the London Underground ventilation shaft located on City Road – now part of the Northern Line ventilation system – but once the shaft of the former City Road underground station. The Centre uses a 2m diameter fan underground to extract the warm air from the shaft below. The warm air is then used to heat water, which is pumped to buildings

in the neighbourhood through a new 1.5km network of insulated underground pipes. The water temperature can be increased to 80°C (although it is set at 70°C to increase efficiency) using heat pumps and then transferred via heat exchangers to communal heating system loops on housing estates. Heating bills for council tenants connected to the network will be cut by 10 per cent compared with other communal heating systems.

Continues on page 2 >>

3

Chair's Letter:
Must recession mean
regression?

4

AIMS assets and
threads
Simon Lewis

6

Coronavirus (Covid-19)
and JCT Contracts
Peter Hibberd

8

Digital first with JCT
Online

10

JCT Interviews...
Steven Carr

12

JCT Digital Contracts

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JCTNEWS

2

The Centre's combined heat and power technology also generates electricity – which is fed into the London Underground network and an adjacent tower block, powering its communal lighting and lifts.

The project includes a number of energy and cost-saving innovations. One includes the installation of two smaller gas-fired CHP engines. These provide both heat and supply electricity directly to the heat pump when the power from the grid is at its most expensive, which helps reduce the overall cost of the heat. Secondly, discussions with London Underground in establishing the size and function of the fan serving the ventilation system, resulted in a solution to integrate the heating and cooling functions and the fan was upgraded to enable it to be reversed to supply cooler air to the tube during the warmer weather.

In terms of the site itself, whilst it was small and neglected, it was in a prominent position on a City Road junction. This meant there were many physical constraints during construction, including below-ground voids, the need to maintain access to the shaft, and proximity to adjacent buildings.

Consultations were carried out with local community, planners, and local councillors to develop a design that included combining new elements with existing features and creating a set of prefabricated structures, attractively clad and set in enhanced landscape. It was also important to minimise the visual and environmental impact on adjacent residents, echo existing building lines, but take the opportunity to strengthen street edges and redefine the street corner.

Robust materials were chosen to resist graffiti and surface damage, including black glazed bricks and charcoal vitreous enamel steel panels at ground level. These materials were chosen for their visual association with similar materials used on the underground. Scottish artist, Toby Paterson, was commissioned by Islington Borough Council to create cast aluminium relief panels that tessellate across the base. They are designed to celebrate the often overlooked and undervalued everyday infrastructure that defines many Londoners' lives.

Rich, dark, copper-coloured metal clads the upper stories. Its perforated pattern ebbs and flows in response to the varying degrees of ventilation required for the equipment behind – providing dynamism and transparency to the façade. The semi-transparent façade gives a clue to the invisible network below ground.

The Islington Council-led scheme included collaborations with Transport for London and the Mayor of London, along with a number of other key contractors and specialists.

As a key partner in the scheme, TfL upgraded its City Road mid-tunnel ventilation system to enable the capture of waste heat from the Northern Line tunnels. TfL is carrying out further research to identify opportunities for similar projects across the tube network as part of its Energy and Carbon Strategy. The Mayor of London brought together Islington Council and TfL to form the partnership that has delivered the project. City Hall also funded the early feasibility work and coordinated London's overall involvement in the CELCIUS project. CELCIUS is an EU funded project that provided funding for the Centre as part of a wider project exploring low carbon innovation in heat networks in European cities, including Cologne, Genoa, Gothenburg and Rotterdam.

Cullinan Studio was responsible for the architectural concept design, and carrying out the consultation with local community, planners, and local councillors to secure planning permission. McGurk Architects were then appointed to take the design through to completion. Ramboll was appointed client's engineer and contract administrator, developing the design of the system. Ramboll carried out the feasibility studies to determine that the heat pump concept was

financially and technically viable. This involved investigating the impact of lower temperatures for the connected buildings' heating and domestic hot water loads to ensure demands could be met, and end user comfort wasn't compromised. Colloide Engineering were the design and build contractors for the project and GEA provided the design, manufacture, and installation of the heat pump system.

The JCT Design and Build Contract is the natural choice for a complex, multi-faceted project, involving close collaboration among a number of clients, client partners and specialists. It is especially relevant where responsibility for different elements of the design is split. It enables all parties to the contract to have a solid contractual under-pinning in order to capture the complexity of the works and the various responsibilities.

Whilst Islington Borough Council's aim was to produce cleaner, greener energy for its residents, the Bunhill 2 Energy Centre goes further by providing a wider urban blueprint for reducing heating bills and CO₂ emissions while improving air quality and making London more self-sufficient in energy. Its projected saving of 500 tonnes of CO₂ per year – equivalent to taking 340 cars off the road annually, helps the council achieve its aim of net-zero carbon by 2030 and proves that the technology is viable and replicable in urban areas around the world.

PROJECT DATA

START.....	2017
COMPLETION:	2019
GROSS INTERNAL FLOOR AREA:.....	617M ²
CONTRACT:.....	JCT DESIGN AND BUILD CONTRACT
ARCHITECT:.....	CULLINAN STUDIO (DESIGN)MCGURK CHARTERED ARCHITECTS (DELIVERY)
CLIENT AND PROJECT MANAGER:	ISLINGTON BOROUGH COUNCIL
KEY DELIVERY PARTNER:.....	TFL
STRUCTURAL ENGINEER:.....	RAMBOLL (DESIGN) MCMAHON ASSOCIATES (DELIVERY)
M&E CONSULTANT:.....	RAMBOLL
QS:.....	GLEEDS
LANDSCAPE CONSULTANTS:.....	J&L GIBBONS
CDM CO-ORDINATOR:.....	AECOM
APPROVED BUILDING INSPECTOR:.....	ISLINGTON BUILDING CONTROL
DESIGN AND BUILD CONTRACTOR:.....	COLLOIDE ENGINEERING
ARTIST:.....	TOBY PATERSON
HEAT PUMP SYSTEM:.....	GEA (DESIGN, MANUFACTURE, AND INSTALLATION)
TESTING AND COMMISSIONING:.....	TOPIC PLAN
PROJECT CONSULTANTS:.....	INNER CIRCLE CONSULTING
RIGHTS OF LIGHT:.....	RIGHT OF LIGHT CONSULTING
CAD SOFTWARE:.....	MICROSTATION, REVIT

MUST RECESSION MEAN REGRESSION?

Chair's Letter



Richard Saxon CBE

The 2008 recession destroyed a decade of progress in modernising construction practice as everyone reverted to pre-Latham/Egan behaviours. Progressive practice has climbed back in the last decade, but will it all be lost again?

Two recessions ago, in 1992, the government asked Sir Michael Latham to report on how to improve the suffering construction industry. Construction always fares very badly in downturns as public and private clients typically slow or stop investing. Constructors and consultants shed staff and bid low to keep working, reinforcing the race to the bottom. Latham in 1994, followed by Egan in 1998, called for much more collaboration across the industry and leadership from clients too. Legislation to reform payments and dispute resolution was passed. Investment in people and process followed, with Constructing Excellence leading the charge. Safety and sustainability became watchwords. Yet in 2008 the wheels came off again. Demand collapsed and suppliers bought what work there was at loss-making prices, relying on others' errors to claim back some profit. Trust, money and sustainability evaporated. Another generation of talent was lost to the industry. The default setting of people under stress seems to be to think short-term and to exploit the weakness of others.

Since that collapse, the industry has climbed back slowly but impressively. A Government Chief Construction Adviser was in place from 2009 to 2015, followed by the Construction Leadership Council. Transformative digitalisation policies were set running; modern methods of construction were encouraged. Whole-life-thinking and 'Procurement for Value' came into view, with Net-Zero carbon emissions and 'Environmental, Social and Governance' policies supported by clients across the board. Innovation, based on research and development and with constructors involved early to influence design, all depends on clients buying for value, not on a lowest capital cost basis. Suppliers must be profitable enough to do the R&D, invest in technological transformation and train and nurture expert staff. Long-termism must reign. The widespread use of Framework Agreements and the arrival of truly collaborative approaches like Project 13 and Insurance-Backed Alliancing augured well.

Now we are in the deepest downswing in 300 years it is hard to see how we will avoid falling backwards all over again. Cost consultants are projecting likely effects on tender prices just like those of 2008. Can anything save us?

Signs of hope are out there. The government clearly sees the value of the construction industry to the economy, enabling growth and quality of life. The high level of spontaneous collaborative working shown during the Covid-19 Nightingale Hospital programme was impressive to everyone. Rather than renewing the austerity of the post 2008 crash, government may well press on with its huge pipeline of economic and social infrastructure, including affordable housing projects, and continue the recent innovations in procurement practice to do so. Net-Zero targets and the Better Buildings Partnership of developers may well survive, as may the reforms flowing from the Hackitt review of building regulation. Concern for the mental and physical health of workers, reinforced by the Covid-19 crisis, may well lead to more offsite and remote working and to better productivity. Digital technologies are flowering, enabling new business models to emerge.

But behaviours have to be watched. Risk aversion must be kept at bay. As Mark Farmer's Cast Consultancy has recently said "it is imperative that all parties are professional and ethical in all dealings, avoiding bid peddling, Dutch auctions etc". There are signs that major contractors are being protective of key specialist firms, taking them under their wings rather than, as previously, exploiting their fragility. Some vertical integration of supply chains may result, reversing the damaging fragmentation that fed the vicious cycle so many times before.

On the back of a countercyclical public sector push, private sector investment can revive. There will be many changes from previous norms as the shape of the economy and of cities shifts. Many ideas are in circulation for rebuilding our economy on a better basis, greener and more equitable, which will all demand construction. And there are reasons to hope that, for our industry, this deepest of recessions won't lead to a repeat of the regressions of the past.



AIMs ASSETS AND THREADS

SIMON LEWIS – PARTNER, WOMBLE BOND DICKINSON (UK) LLP

Whilst the world continues to struggle with the effects of the COVID-19 pandemic, there are signs that the construction sector is beginning to operate once again, albeit within strictly regulated parameters. Obviously, from an economic perspective this is a good thing but also there are a number of issues which are pressing for the construction sector and which should be progressed as swiftly as reasonably possible even in these difficult times. One of these is the Grenfell Inquiry, the ongoing review of the terrible fire at Grenfell Tower on 14 June 2017 and its consequences. In this article I would like to review a number of developments that have occurred over the last few years (which I have, for obvious reasons, called “threads”) which afford the construction sector an opportunity to address the pressing issues raised by the Grenfell tragedy. This is an opportunity which the construction sector should not let slip through its fingers.

First thread: The Hackitt Report and after

As is well known, the tragedy at Grenfell Tower led to, amongst other things, the review carried out by Dame Judith Hackitt the findings of which were summarised in *Building a Safer Future*, the final Report published in May 2018. One of the proposed package of reforms recommended by the Report is to establish an obligation on those who procure, design, create and maintain buildings to be responsible for ensuring those buildings are safe for those who live and work in them. Linked to this obligation is the requirement to create a regularly updated digital record of information for new higher risk residential buildings. This record is now, famously, known as the “golden thread” of building information.

Following on from the Report, a consultation paper *Building a Safer Future: Proposals for reform of the building safety regulatory system* was issued by MHCLG in June 2019. This adopted all of the Report’s recommendations. The paper also emphasised that the “golden thread of accurate and up to date information about the design, construction and ongoing maintenance” of the relevant buildings would have to be stored digitally using a common data environment, allowing different parties to work collaboratively on developing and maintaining the information. Information would need to comply with BIM/information standards.

A subset of the golden thread of information is the key data set. This is required to enable the building safety regulator to analyse data across all relevant buildings. It is likely to include details such as unique building identifier, location, size, building type/purpose, years built and refurbished, façade and structural information and minimal information on safety. It is to be held in a specified format, likely to be maintained by Government with detailed data standards that will specify the formats and naming conventions for the variables and the key data set and the file formats in which the data set should be shared. It should be publicly available by default.

The first steps in the primary legislation needed to implement the proposals in the consultation paper were referred to in the Queen’s Speech on 19 December 2019, which included a Building Safety Bill intended to put in place new and enhanced regulatory regimes for building safety and construction products. This was to apply to “in scope” buildings with a storey above 18 metres and which contain one or more dwellings or an institution or a room used for residential purposes (but not a hotel, boarding house or hostel). Consequently, this would include residential blocks of flats, student accommodation, care homes, sheltered housing, hospitals and dormitories in schools. At the time of writing, the Bill is awaiting a date for its second reading.

Prior to this, the Building (Amendment) Regulations 2018 came into force on 21 December 2018. Broadly, this bans the use of combustible materials on external walls of the sort used on Grenfell Tower (ACM cladding) on buildings which are in scope as described above.

Earlier this year, on 20 January 2020 a new package of building safety reforms was outlined in Parliament. There was less emphasis on the height of the building and more on ensuring safety at any height. In addition, the Government introduced a Fire Safety Bill to enforce remediation measures which at the time of writing is at committee stage having passed its second reading on 29 April 2020. No date is currently set for the committee stage.

Further changes will follow. Whether these occur later this year or next year may depend on when the second phase of the Grenfell Inquiry is concluded and makes its recommendations. The inquiry has been paused since

16 March 2020 but is currently exploring the possibility of restarting with limited attendance at some time in July.

For those interested, a useful source of updates for regulatory developments is <https://www.gov.uk/topic/planning-development/building-regulations/latest>.

Second thread: The AIM and the Twin

The developments in digital technology over the last decade or more offer the obvious solution to the information storage and use issues raised by the “golden thread”. Over this period BIM has developed into a widely-known tool in the construction sector. It is, of course, the case that BIM applies across the entire life cycle of the asset and that the Project Information Model (PIM) created for the design/construct phase should inform the Asset Information Model (AIM) for use during the operational phase.

At present, the characteristics and use of the AIM are set out in PAS1192-3, although this will soon be superseded by ISO19650-3 as part of the ongoing replacement of the existing Publicly Available Specifications governing BIM with the international ISO19650 standard. The AIM as defined in PAS1192-3 includes:

- Information concerning the original brief, specification and design;
- A 3D object based model/models of the environmental location of the asset (which could be a revised or “collapsed” version of the PIM);
- Information concerning ownership of the asset and data obtained from the maintenance, survey or other work carried out on the asset during its lifetime; and
- Information concerning data obtained from monitoring the operation and condition of the asset.

The AIM as envisaged in PAS1192-3 may however be in the process of being overtaken by the concept of the Digital Twin. The CDBB publication *The Gemini Principles* defines a Digital Twin as “a realistic digital representation of assets, processes or systems in the built or natural environment”. The main distinguishing feature of a Digital Twin is its connection to the physical twin.

The maturity spectrum for the development of Digital Twins as set out in the IET/Atkins report *Digital Twins*

for the Built Environment envisages a logarithmic increase in scale of complexity from 0 to 5 starting with simple capture of reality via scans, photography or even drawings to provide a brownfield or existing as built survey through to the autonomous operation and maintenance of an asset comprising complete self-governance with total oversight and transparency via the use of the Digital Twin. Obviously, we are nowhere near stage 5 as yet.

Stage 2 of the maturity spectrum is defined as the connection of a model to persistent (static) data, metadata and BIM “Stage 2”. This is the point at which it would seem the AIM intersects with the Digital Twin. From this perspective the AIM is not something different from a Digital Twin but more like a stage in its development. To paraphrase a well-known saying, an undeveloped AIM is no more than an O&M manual on steroids. A properly developed AIM marks a step in the evolution towards the Digital Twin as defined in the Gemini Principles.

Drawing the threads together

The development of Digital Twins and the increased use of AIMs can provide the basis for addressing the requirements of the “golden thread” and the key data set. The opportunities offered by these developments in digital technology will allow the construction sector to implement the recommendations of the Hackitt Report. We have the tools available to us to drastically improve building safety in the wake of Grenfell through implementation of a clear “golden thread” of digital information. The framework in relation to AIMs is already in place and in the process of being updated through the introduction of ISO19650-3. Work on Digital Twins is underway. What we now need is the will to implement these changes.

Simon Lewis is Partner, Construction and Engineering team at Womble Bond Dickinson (UK) LLP. He can be contacted at simon.lewis@wbd-uk.com or [@simonlewislaw](https://www.linkedin.com/company/wbd-uk)



CORONAVIRUS (COVID-19) AND JCT CONTRACTS

PETER HIBBERD

The outbreak of the coronavirus is of great concern and those involved with construction projects should, despite the difficulty of the situation, take a measured approach and not act rashly, such as walking off site, as this could constitute a repudiatory breach of contract. The primary consideration is the health and safety of the workforce and the general public. Contractors and clients have obligations in this respect, notwithstanding their respective contractual positions but, naturally, they will also want to understand their respective positions under the JCT contract which they have executed. It is essential that the parties to the contract and their advisors communicate openly as to how the project is to be dealt with and, wherever possible, agree a way forward within the parameters of the contract.

It is now clear that the coronavirus will have a significant effect on most construction projects, both as a result of the virus itself and the Government's response to it. Also, that its effects will be felt for an unknown duration that may run for some months. The uncertainty of duration makes appropriate action on the part of contractors and clients that much more difficult to determine.

The Government's response includes:

- The Health Protection (Coronavirus) Regulations (No. 129) laid on the 10th February 2020
- The Health Protection (Coronavirus, Business Closure) (England) Regulations (No.327) laid on the 23rd March 2020
- The Coronavirus Act 2020, 25th March 2020
- The Health Protection (Coronavirus, Restrictions) (England) Regulations 2020 (No.350) laid on the 26th March 2020.

Wales is subject to separate regulations. The timing of these regulations and Act is relevant to the contract provisions because Government action after the Base Date defined in the contract is a specific Relevant Event.

Distinguishing between impacts caused by the virus and impacts caused by Government action

Even before any Government action, delay to the works may occur as a result of any sickness or self-isolation caused by the virus infecting members of the project workforce and supply chain. In addition, delays may also be caused where action by the Government restricts operations both on and off-site. From a contractual perspective this distinction is important because the rights and obligations provided in the contract differ. Also, the contract provisions will operate differently depending on the scale and intensity of the effect of the virus upon the project and whether any effects occurred prior to Government intervention. As one moves through the early emergence of the virus, to the development of the epidemic, and the introduction of Government action, the case for relief under the contract becomes more apparent.

The way these two matters (virus, Government action) impact depends upon the stage of the project at which the commencement of the event gives rise to the delay. Regarding

Government intervention, the nature of the project may also be relevant because such intervention provides additional requirements as to health and safety (e.g. social distancing) yet stops short of an outright ban on construction activity. This was made clear by the Secretary of State for Business, Energy & Industrial Strategy in his letter to the construction industry dated 31st March 2020, which states:

"To help ensure that it is safe for you to operate in your workplace, the industry has worked to develop Site Operating Procedures (SOP), which were published by the Construction Leadership Council. These align with the latest guidance from Public Health England. As this health guidance updates, the SOP will reflect any changes."

The 'Site Operating Procedures' were originally published on the 23rd March. Updated by Version 2, which was immediately withdrawn. Version 3 (14 April 2020) supersedes those versions and brings together the government advice and the latest public health guidance. It is this version of the document that contractors must now follow.

The practicability of complying with SOP may depend on whether the works are new build or works to an existing building, occupied or otherwise. If the contractor cannot comply with, or fails to comply with, SOP it might be required to shut down. SOP states:

'These are exceptional circumstances and the industry must comply with the latest Government advice on Coronavirus (Covid-19) at all times.' and

"If a site is not consistently implementing the measures set out by PHE, it may be subject to enforcement action."

Where it is required to shut down because of the contractor's default then that contractor would not be using best endeavours to prevent delay, which is a requirement of the contract when seeking an extension of time.

Because the existence of the virus and the public health matters enacted by the Government's intervention are separate matters, each project, depending upon its timing and progress at the time, will need to be considered on its own facts in relation to the contractual position. However, projects delayed will fall into three broad groups, those delayed because of the effect of:

- the virus, prior to Government intervention, causing a shortage of labour and materials, different working or by delay of a Statutory Undertaker carrying out statutory obligations.
- the virus, both before and after Government intervention, causing a shortage of labour and materials, different working or by delay of a Statutory Undertaker carrying out statutory obligations and compliance with the requirements of SOP.

the virus after Government intervention, causing a shortage of labour and materials or by delay of a Statutory Undertaker carrying out statutory obligations and compliance with the requirements of SOP.

Understanding and complying with JCT contract provisions

JCT contracts make provision for dealing with the above situations and should be complied with. The above situations may give rise to:

- Extension of time
- Suspension of the works
- Termination of contractor's employment

JCT contracts provide that the contractor gives notice as soon as it becomes apparent that the progress of the works is delayed. The notice must state the cause of delay and identify any event which is a Relevant Event under the extension of time provisions. The notice is also required to give notice of expected effects and estimated delay where practicable: something that is likely to be largely impossible in the current circumstances.

The contractor, in seeking an extension of time to the contract completion date, must constantly use best endeavours to prevent delay in the progress of the works. This means continuing to work in accordance with SOP unless it is impractical to do so.

Where a delay to the works has been caused by compliance with the Government's intervention, a specific Relevant Event applies.

The ordinary shortage of labour and materials does not give rise to an extension of time and is the contractor's responsibility but delay by a Statutory Undertaker carrying out statutory obligations is a Relevant Event. Whether such shortages which arise because of the virus (as compared with Government intervention) remain the contractor's responsibility depends on the circumstances and whether there is a prevailing epidemic impacting upon the works. The timing by the World Health Organisation of its notice of a pandemic is also relevant. The Relevant Event that may apply in such circumstances is force majeure but clearly this will not always apply. If that Relevant Event applies the contractor is relieved of liquidated and ascertained damages. Force majeure in JCT is not defined because it is intended to embrace the unknown and to enable the contract provisions to remain operative in all circumstances, thus avoiding the application of the legal concept of frustration. Force majeure is normally held to mean all circumstances beyond the will of man, and which it is not in his power to control. (*Lebeaupin v Crispin* (1920)). But as Parris on the Standard Form of Building Contract puts it, "the term is a chameleon expression which takes its colour from the contractual background against which it is used".

Additionally, the contractor may suspend the works where it is impracticable to continue work in the light of the current restrictions. If the suspension that follows is longer than that stated in the Contract Particulars, then either party may give notice of termination of the contractor's employment. Although

either party may terminate, the parties may, depending on circumstances at the time, agree other arrangements for continuation of the project.

The contractor cannot recover loss and expense either in respect of an extension of time for the Relevant Events referred to above (i.e. force majeure, act of the UK Government) or upon termination of the contractor's employment as these are treated as neutral events. Although no money may flow it is still important to establish whether a delay falls under one or other of those events in order to determine an appropriate extension of time. Because of the exceptional circumstances of the coronavirus and the many possibilities of how delay might arise, with problems of concurrency, a pragmatic approach may be appropriate in some situations. However, it should not be treated as an opportunity to cover all manner of other programming problems.

In some exceptional situations, possibly where work is in defined areas or sections of existing buildings, the employer or the architect/supervising officer may wish to give instructions as to how to proceed (subject to the contractor's right of reasonable objection) or to postpone the works. In such cases there is provision for an extension of time for any delay that might arise and possibly termination by the contractor where the instructions lead to a postponement longer than the period stated in the Contract Particulars. Where such instructions are given the contractor would be entitled to recover direct loss and/or expense for any variation or postponement and direct loss and/or damage where termination arises.

Under the JCT Constructing Excellence Contract the approach to the coronavirus will be different and dependent upon whether a Risk Allocation Schedule applies and what is included in such schedule. Where the risk is identified in the schedule it will be dealt with as set out therein. If the risk is not set out, then relief is provided where there is occurrence of any other risk which is not reasonably foreseeable at the date of the contract and is beyond the control of the supplier. Notice of the effect of a Relief Event should be sought by the parties as soon as reasonably practicable and agreement sought. Termination under the current circumstances, if it is thought appropriate, is by agreement.

The JCT Minor Works Contract requires the contractor to give notice that the works will not be completed by the date for completion and in doing so can seek an extension of time for any delay that occurs for reasons beyond the control of the contractor. Under the provisions, loss and expense is only relevant in relation to a variation. Damages may be payable only where delay is occasioned by a default of the employer – the effect of the virus and government intervention would not constitute a default unless other factors that laid a specific duty upon the employer were also present.

This article was first issued on JCT blogs in April 2020.



JCTNEWS

8

DIGITAL FIRST WITH JCT ONLINE

Instant access to the contracts and services you need at www.jctltd.co.uk/jct-digital

JCT has been adopting a 'digital first' approach for customers using the JCT Online Store (www.jctltd.co.uk) to make it easier for those who have been working with construction contracts during the lockdown period, and to assist construction professionals in their return to work as the lockdown eases.



JCT On Demand

JCT On Demand is the digital equivalent of the JCT hardcopy contract. Users can purchase any JCT 2016 document via the JCT Online Store (www.jctltd.co.uk) and access the document instantly via their account. **JCT On Demand** enables users to fill in their contract using an intuitive Q&A process to make sure their contract is completed comprehensively.

Currently JCT On Demand is the default option (where available) for products purchased via the JCT Online Store, although customers can still order hardcopy contracts for delivery if they prefer by selecting the 'hardcopy' option from the format box on the product page.

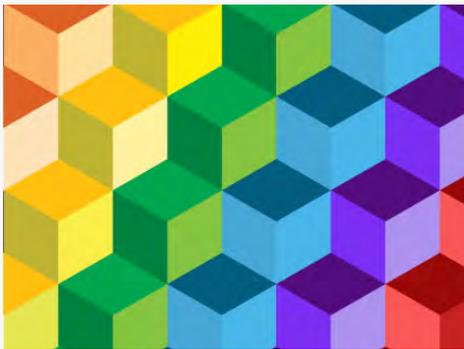
The benefits of **JCT On Demand**:

- Contracts are completed using an intuitive Q&A process, which makes filling in the contracts easy and makes sure that the document is completed comprehensively. Questions change depending on the answers given, so users only complete what is relevant to their project.
- A split Q&A and preview screen enables answers to be seen in context and updated in real time.
- Improved design features, such as easy to access document actions, interactive progress bar, and an easy to navigate folder structure, help to make finding and progressing through contracts a breeze.
- Printing DRAFT watermarked copies during the process enables documents to be reviewed.
- Comparison documents can be viewed and printed, showing all changes against the published JCT text, ensuring full transparency.
- Finalise and print - when ready, documents can be finalised, the draft watermark is removed, and final copies can be printed for signing.
- All documents within the JCT 2016 Edition of Contracts are available.

Find out more at www.jctltd.co.uk/jct-on-demand.

JCT Digital provides a range of options for instant online access to any contract within the JCT 2016 Edition, enabling users to conveniently fill in and, depending on the service chosen, edit their contract in a safe and secure online environment.

Under the umbrella of JCT Digital is included two services - **JCT On Demand** and **JCT Construct**.



JCT Construct

JCT Construct is a subscription service with advanced editing features, enabling users to add their own bespoke clauses, amendments, or other text.

The document updates in line with user-added content and elements such as clause numbers and table of contents are updated automatically. The system supports guest sharing for collaborative working, so all those involved in the drafting can share drafts, make edits and view changes.

A range of subscription options support single and multi-users and, as with JCT On Demand, the full range of JCT 2016 documents is available.

The benefits of **JCT Construct**:

- Easy to use, flexible, and secure online contract drafting.
- Contract text can be edited, with auto-updating of clause numbers, cross-references in the JCT text, and table of contents.
- Guest sharing supports collaborative working amongst those involved in the contract drafting to share drafts, to edit, and to see all the changes.
- Version-to-version comparison enables any changes between draft versions and against the published JCT text to be seen, ensuring full transparency between the parties to the contract at all times.
- Boilerplates can be created so that standard sets of changes can be re-used.
- Printing DRAFT watermarked copies during the process enables documents to be reviewed.
- Finalise and print - when ready, documents can be finalised, the draft watermark is removed, and final copies can be printed for signing.
- Flexible subscription options – for the full range, or a more limited range of contracts within the JCT 2016 Edition, plus options for single or multi-user subscribers are available.

Find out more at www.jctltd.co.uk/jct-construct.



JCT INTERVIEWS...



STEVEN CARR

BSc (Hons), MRICS

Director: Construction, M&G Real Estate Limited

Member of the JCT Council, BPF Representative

Liveryman of the Worshipful Company of Chartered Surveyors

In this series we shed some light on some of the key people who are involved with or give their time to support JCT, to ensure that all areas of the construction industry are represented and can contribute to the development of our contracts. We will look at how our interviewees contribute to JCT specifically, and gain their views on JCT's wider role within the industry.

Steven is a member of the RICS, qualifying in 2002 as a Chartered Building Surveyor. He has spent the bulk of his career in client-side organizations, following a solid grounding in private practice as a building surveyor and project manager. He has experience of most types of construction projects, including some 15 years' working within developer and asset management organisations, advising funds upon all aspects of construction procurement, professional services appointments, framework agreements, acquisition/disposal technical due diligence, and forward funded development projects throughout the UK and Europe.

JCT: Steven, how did you first come to be involved with JCT? Why do you think it is important to be involved?

SC: I was invited through the British Property Federation (BPF) to join the JCT College of Employers, Client and Local Authorities in early 2019 following the retirement of my colleague and mentor, who served as a JCT member for many years. I am very much a freshman with JCT but I have utilised the JCT contract forms throughout my working career and seeing how JCT is continually

developing to accommodate evolution within the industry and being able to be part of that process is really special.

The colleges provide balance to the development of the JCT contract forms and I think it is important to have a broad representation across the different types of users. I am honoured to be asked to contribute in whatever way I can by representing the College.

JCT: Can you tell us about any specific work you're currently doing with JCT (e.g. any work with working groups/committees/Council/Board)?

SC: I am a new member of the Council and therefore few opportunities have been available for more detailed involvement beyond the regular Council meetings. This is hopefully something that will evolve with time.

JCT: Do you have any personal career highlights?

SC: The nature of my role means that I am unable to divulge much in the way of detail of my involvement in various projects, as many are market sensitive. However, every week I think I achieve a small career highlight through the breadth of contract, asset classes and activities of which I have an overview. Everything offers an opportunity to improve your skills that little bit more. I am not sure there are any shining stars amongst my many projects over the years, but I do frequently pass developments and bore my wife about how "I was involved in that project" although she is eternally grateful much of my early career was in Manchester as we live in London.

More recently I received the freedom of the City of London, which was a personal career highlight, but I have always considered myself very fortunate to become involved in property in the first place. I was academically underwhelming at school, so my career highlight is probably at its outset when the head of faculty at Salford University took a chance on me entering as a mature student to study Building Surveying. 25 years later I still love my chosen career and will be forever grateful for the opportunity.

JCT: What are you most proud of about the construction industry as a whole and where do you think it most needs to improve?

SC: I am most proud of the people in construction. We come from diverse social backgrounds, economic realities, and experience levels but we come together to create the best projects and developments, of which we can be collectively proud, and hopefully drive social change within the communities that they serve.

Technology is also advancing with modern methods of construction and off-site construction becoming commonplace. While these developments require careful consideration, the benefits they offer to cost, programme, and quality are in my view positive and, as ever, the industry is coming together to find ways of doing better.

In terms of areas for improvement, there is rather a long list. To focus on a couple, I would say that while the industry has made moves forward in encompassing diversity, it still has a way to go and we all have a part to play in addressing these concerns. Another pressing issue is the environment, which needs to be given more weight in design development rather than a tick box exercise to meet the minimum requirements. Environmental

legislation and compliance is becoming ever more stringent and going way beyond basic compliance is the only way to mitigate future changes.

JCT: What do you see as the main challenges for the construction industry over the next five years?

SC: The economic and social reality we find ourselves in as a consequence of the Covid-19 pandemic is no doubt going to be an issue for the foreseeable future, but hopefully the next few years will bring greater awareness of the importance of contractual knowledge. In addition, the contraction of the insurance market and the movement towards a project alliancing model of shared responsibility offer a unique challenge for a traditionally siloed liability project structure. However, I suspect the industry's biggest immediate challenge is how we get back to a working environment approaching a pre-Covid-19 normal and weather the current economic storm.

JCT: Does JCT have a wider role to play in the industry beyond producing contracts?

SC: Training and education is critical in equipping professionals with the skillset to understand, select, and administer the JCT contract suite effectively. I am fortunate that I spend a great deal of my time poring over JCT contracts due to the volume of activity I overview, but for some professionals who only occasionally interact with a JCT contract it can be a confusing and daunting prospect. JCT recognised this and in 2019 launched the JCT Training programme with sessions delivered by past and current members of the JCT Council, and members of the JCT Drafting Sub-Committee. I cannot recommend this highly enough for those wishing to gain more confidence in this area.



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