## "Construction - the secret to more collaborative contracting and better project outcomes through Diversity and Inclusion."

Good afternoon and thank you so much for joining me for this prestigious event, it is a huge honour to be invited to be asked to speak, and to follow in the footsteps of so many other great speakers of the past.

JCT formed much of my early career as a trainee QS, in fact it felt like I spent most days with either a JCT '80 or an SMM6 in my hand – many a happy hour passed as a young Contractor scrutinising Clause 13 to see if I could find any justification or relevant event claim for additional entitlement! Happy Days!

I am quite sure that in those early days I could never have imagined myself being invited to deliver a lecture named in honour of Philip Povey one of the titans of JCT, it is a real privilege.

But before I go any further, please allow me to introduce myself, my name is Katy Dowding, and I am President and CEO of Skanska UK. Employing nearly 3,500 people, we have operated in the UK as Skanska for nearly 25 years now, delivering some iconic projects such as the Gherkin, M25 widening, Barts and London Hospital, HS2 tunnels and many more.

Coming from Swedish heritage I think it is fair to say, that we have a natural predisposition to working collaboratively, with our naturally flat organisational structures and consensus approach to decision making – but there is more to true collaboration than a like of Abba and eating meatballs whilst you go furniture shopping.

However, I'd like to start my lecture some time before my Skanska days, in fact even before my first foray into construction and JCT 35 years ago. Let's start at the very beginning – which for me is 1970!

This is what childhood looked like to me – who can forget the Queen's silver jubilee in 1977 with the fantastic street parties, being sent out to play during the long hot summer of 1976 and being told not to come back until teatime, singing along to the Wombles, being fascinated by the Slinky as it went down the stairs, or the delight of a variety pack at Christmas full of sweets that have long since stop being made or have had a complete name change?

But for me, this was the centre of my Universe – the riding stables. I first started attending at the age of 5 and from that point onwards I was hooked. Every morning before school, every evening after school and from sunrise to sunset (and sometimes a fair bit beyond) every weekend. Come rain or shine, I was there, muddy and smelling of manure and having the time of my life.

But what do you say has this got to do with inclusion, diversity and collaborative contracting in Construction? What I didn't realise, was that I was witnessing was not only one of the most impressive business models that provided a seemingly endless supply of free labour, but also gave me my first experience of inclusion and collaborative working.

You won't be surprised to know that I was not the only pony-crazy young girl at the riding stables, in fact there were quite often upwards of 20 of us there, all giving our time for free and certainly doing more hours than some full time jobs – but we did it for the love of the horse – that star prize, being allowed to ride them. But of course, it is not all fun and pony treks, there is a lot of muck to be cleaned up, tack to be

polished, buckets of water to be carried, you had to help with the lessons, fix the water troughs, carry bales of hay and straw, fix the wheelbarrows and much, much more.

By the time I had reached my early teens and having had a few years at the yard under my belt, I soon rose to the unofficial position of having to organise the girls that helped in the stables.

Now this is not an easy challenge, you have a workforce that is unpaid, has no obligation to turn up and is only interested in 10% of the job that they will be asked to do (the bit that involved riding the ponies!).

So, I had to devise a way of working that not only got all the jobs done, but kept the workforce engaged and continuing to turn up!

And that started with discussion, making sure everyone was a part of that discussion, that everyone had a voice and that that that voice was heard, acknowledged and responded to. There had to be fairness and equity. Preferences, limitations and individual needs had to be considered, and we all had to be open to new ways of doing things and that was hard when you just wanted to get on with your day. But we did, we took time to work together and draw up the rotas, those that quite liked sweeping did more of those jobs, the stronger girls and boys did more of the carrying and those that were quick and nimble did the running backwards and forwards to the fields with all the equipment for the lessons. And we made sure that **everyone** got a ride on the ponies. It took a lot longer to set up, it was hard to work out how jobs were shared, as we all had to do bits that we didn't like, but it lasted for years as a system and every year it got a little better. New people joined and we listened to their new ideas – those that had been here a while were able to share

observations as to how things could be done better. A scenario that had all the potential to be a hotbed for tantrums and falling out was a real success through collaboration.

But let us now start fast-forwarding to my career in construction.

I will provide a health warning at this point, I'll make some broad generalisations, what I'll describe will not have been everyone's experience, some of you may have worked in very inclusive and collaborative environments back in the day, but I would be inclined to suggest that this was not always the case.

I joined the industry in the late 1980s one of only 5 females in a day-release class of 65, I only worked out on site with 1 woman in the first 6 years of my career. There was very little diversity, so actually, there was little recognition for the need for inclusion. In an homogenous team, there was already inclusion – everyone was part of the gang, well nearly everyone...

On my first day on site, I asked where the ladies' toilet was, only to be told "we haven't got one – we weren't expecting a woman, you will have to go the petrol station a mile down the road". Whilst not ideal, I could excuse that they weren't expecting me, their experience for the whole of their prior career never had a woman on site and so didn't need a toilet for one. Where the lack of inclusion really bit though, was the fact that for the two years that I was on the project nothing changed, I never did get a toilet despite asking and so, for 2 years I had to build in a 30–40-minute round trip if I needed a break – not ideal if you're in the middle of a meeting! In fact, I have worked out that if that had continued for the whole of my career that, based on an average of 4 toilet visits a day, in travel time alone, I would have lost nearly 1.3 million productive minutes of work, that's 21,500 hours, 2,900 days, 572

weeks, or 12.4 years! That alone is the economic case for inclusion! No wonder we have a productivity challenge in construction!

These were the days of adversarial contracting, business on stage and screen was personified as "greed is good" and the suggested way to getting to the top in a career was to step on or over those around you. The bigger your shoulder pads, the more likely you were to be successful, if you could dominate a meeting and force your ideas through that was seen as doing a good job.

Casual misogyny out on site was par for the course and having your ideas and thoughts passed over (if they were heard) was commonplace. Contracting tended to be siloed with Clients, Architects, Engineers, Contractors and supply chain all working to their own objectives, protecting their own positions, and prioritising their own needs. Communication was formal, on a needs-only basis, and was frequently defensive or confrontational and incentives were not aligned.

But did it make a difference?

Were the outcomes any worse?

Certainly, we know that there has been little progress in productivity in our industry, but is that a consequence of how we contract or wider macro-economic conditions outside of our control? Is it because of regulatory changes or market constraints? Is it because the workplace doesn't yet allow us to bring our whole self to work?

Or is productivity the wrong focus?

Should we be looking at the outcomes of our projects?

Are the end-user and customer needs being met, are we achieving better outcomes now, do our projects better serve society and create wider value?

During a study by Dr Katherine Phillips and a team of researchers from Northwestern and Stanford Universities, their research used a game. I'll share with you an extract from the '21 toys' blog.

'Every player was given the exact same set of clues to solve a murder mystery. At first, most of the students are put into groups of 3 where everyone had a similar background and were part of the same group within the school. A few minutes later, each group of 3 was joined by a 4th person. Half of the groups were joined by someone who was like them, and half the groups were joined by someone who was different. To make this a little easier, we'll say that half of the groups were made up of all ducks, and half of the groups had 3 ducks and a goose.

These groups then had a short amount of time to collaboratively choose a suspect and submit their answer to Dr. Phillips' team to see if they solved the mystery. And that's when things got interesting.

The groups that had a goose performed better than the all-duck groups. A lot better.

The all-duck groups chose the right suspect 54% of the time, while the groups with a goose got it right 75% of the time. The goose groups did 21% better.

But when Dr. Phillips asked teams how confident they were in their answer, the all-duck groups were 50% more likely to say they were sure they had the right suspect. They also said they were more comfortable working in their group and enjoyed the activity more than the groups that included a goose.

Since everyone had the exact same clues, it wasn't about different people bringing in different information, something that is commonly cited as a reason for diversifying teams. The diverse teams got their edge from the way their process changed as they

reacted to having a new and different person on their team. The way that the goose groups worked together was different.

First, they started by giving the new member a clear overview of their process so far, assuming that a goose would approach the problem differently than a duck.

Second, they listened to the goose a lot. All groups listened to their new member, but when a goose showed up, the ducks listened for longer. They were looking for different information or ideas.

Perhaps the most interesting difference is that members of goose groups were more willing to change their minds. They challenged their assumptions and examined their initial ideas more critically. They were also more open to exploring different solutions and were more likely to choose a different suspect than they had initially thought of on their own.

But what happened in the groups that weren't diverse?

The all-duck groups were more susceptible to several cognitive biases that are especially prevalent in groups with similar members. The false-consensus effect is overestimating how much other people agree with you or think in the same way. Ducks assume that the way they think and the things they know are shared by all ducks. The overconfidence effect is being more confident in your judgement or solution than the data supports. The all-duck groups were more likely to think they were right, even if they were wrong. It's also important to note that people typically gravitate to people that they think are like them when forming a group. So, unless

you look for geese on purpose, you'll probably end up working with a bunch of ducks.'

Does any of this sound familiar?

Let's now reflect on how that may work in the world of construction.

Never more so has the adage "time is money" been truer, than in Construction today. Once land is purchased or funds secured, the push to get building and start realising the return on your investment is significant whether you are a high-class office developer in the City, a headmaster waiting for your new school, or you are sitting in your local traffic queue waiting for the bypass to be built. Ministers and MPs like nothing better than a photograph at the front of a TBM or posing with a shining shovel as the first sod is broken, but how much does this push to start impact the quality of the upfront work that is carried out?

As Dr Phillips and her team discovered, quick confident decisions are not always the best or most accurate. Working in diverse teams, creating inclusive conversations can be hard and time consuming, but if we are to shift to an outcome focused approach in our industry, one that brings better value for our end-users, taxpayers and outcomes for our customers, surely that up-front investment is going to be worth it?

Let us first consider traditional, more adversarial contracting models, imagine a traditional 1980s competitively tendered project. Early decisions would have been made by just a few regularly used parties, with little diversity of either participants or

thoughts, the site would have been identified and planning progressed based on well used outline designs and specifications to ensure it gets approval. Assumed costs and schedule would have been drawn up based on typical historic information to secure funding. And then a tender would have been sent out to multiple parties.

Typically, there will have been little end-user engagement at this point, just an assumption of their requirements using frequently used models. Multiple parties would compete, focusing on achieving lowest cost and shortest schedule, whilst alternative proposals may be considered, all bidders would be required to bid on a compliant design to select the winning bid with many of the alternative options being lost along the way. Once the Contractor was selected the race to start building began, closing out design decisions, rapidly evaluating, selecting and rejecting options with very little reference back to the assumptions that the original scheme was built on, opportunity for end-user engagement was limited and the opportunity for value adding additions limited by budget and funding constraints.

As a Contractor in a traditional lump-sum project my motivation would be to get the design closed out, subcontractors procured at today's prices and to have as short as possible programme to minimise my Prelims and maximise my returns. The Designer, if they are contracted on a lump-sum, will have forecasted their tender based on the planned number of hours input, it is not in their interest to participate in multiple meetings, consider different options and solutions and debate with wider groups. You don't need to look to hard to come to the view that this typical pattern was not collaborative, didn't contain much diversity of thinking and wasn't getting the best outcome through inclusion. In short, the real victim in this situation was the enduser and value creation.

This approach has long been recognised as constraining, quite often resulting in at least sub-optimal and sometimes wholly unsatisfactory outcomes for all parties involved.

If we are truly looking to evolve from this, look at outcome driven value adding solutions that can achieve cost savings, time efficiency, improved quality and the mitigation of risks, the currently held philosophy is that we need to move to collaborative forms of contracting.

I would support this view, however, to truly unlock the potential of collaborative contracting, the missing ingredients I feel are inclusion and diversity.

Let us first look at collaborative contracting. The term embraces a wide and flexible range of approaches to managing the relationship between project owners and other project participants, based on the recognition that there can be a mutual benefit in a more collaborative and cooperative relationship between them. If the project owner contractually commits to share the benefits it receives from outstanding performance by the non-owner participants, the contract can financially motivate the non-owner participants to achieve such outcomes, even if they need to expend more effort and money to do so. This is often expressed as the establishment of a win-win scenario.

There's a broad spectrum of collaborative forms of contract for the Construction industry, ranging from partnering to full alliances and Integrated Project Delivery teams, but there are some key features which are common to all of them.

1. Contractual commitment to co-operate and 'act in good faith'

- Early warning mechanisms, designed to alert other participants to emerging issues, so that solutions can be developed and agreed before the issue escalates.
- 3. Early involvement of the main-contractor and key specialist sub-contractors in the design process.
- Governance arrangements that facilitate collective problem solving and decision making.
- 5. Payment arrangements that financially motivate each participant to act in a manner that is best for the project, rather than best for the participant.
- The agreement of each participant to waive its right to sue any other
  participant for mistakes, breach or negligence by another participant (except
  in the case of wilful default).

In short collaborative contracting is 'relationship contracting'

Let me share with you a few good examples from my career where I've seen some good examples of the benefits of collaborative contracting.

15 years ago, we embarked on the @onealliance model with Anglian Water, a collaborative contract which is a partnership comprising 8 companies who each provide specialist knowledge enabling the @onealliance to deliver complex projects for upgrading sewage treatment works in the most efficient way, reducing the cost to Anglian Water's customers.

The alliance works with joint goals and common incentives, is premised on long term ambitions and has maintained broadly the same partners for the whole time.

This has enabled us to form strong relationships with local supply chain partners, giving them long term visibility of workload, enabling them to invest in training people, machinery, technology and innovation.

It has aligned effort to achieve common outcomes, not distracted by commercial disputes, and has resulted in carbon reduction of 54% and cost reduction of 26% over the last 5 years.

My next example is the A14, a highway scheme in Cambridgeshire delivered for National Highways. Originally this was procured in sections with 4 contractors, it soon became apparent that success relied on everyone working together and only achieved the benefits when the whole road was open. The project was then renegotiated into a collaborative contract, with positive incentives to work together to shared goals.

This resulted in the road opening 8 months early and absorbed the impact of Carillion's collapse mid project, without programme or cost impact.

An interesting reflection is that we see a high proportion of collaborative forms of contracting when they are frameworks, or those that are spread over a long period of time – those cases where a relationship is required, rather than just a transactional interface, take for example the National Rail frameworks, these provide visibility of workload under a collaborative contract arrangement which in turn provides the opportunity to develop strong understanding of customer needs and build trust. Performance improves consistently following the benefit of only one mobilisation and creating a learning curve, there is no need to keep re-learning every

time. Risk is fairly shared with ownership based on placed on the best party to manage it.

This has resulted in the ability to achieve value adding outcomes for both the train and freight operating companies, as well as the station users. These frameworks have consistently out-performed client milestones and budgets.

Now I'm sure you will all have read plenty of press about HS2, but one of the things that is less frequently reported in the media is the collaborative contracting benefits that we have seen with the London Tunnels package of works.

This is set up on a collaborative contract form, incentivising all parties to control cost and mitigate risk, regardless of who owns it. It has a fully integrated project leadership team, with no role duplication, which has enabled forward thinking scenario planning to manage risk and seize opportunities, resulting in a positive cando environment with an enjoyable workplace.

In terms of benefits this has mitigated £1.13bn of cost increases compared to traditional contracting models, avoided £230m of cost inflation and delivered £166m of benefits through innovation, as well as mitigating 2 years of programme delays.

We have also seen great examples where industry has worked together in a collaborative way to achieve better outcomes. For example, the work led by Build UK in defining the site operating procedures during COVID allowed the industry to get back to work or the Common Assessment Standard that they have led on allowing

over 22,000 suppliers to be certified enabling them to get into contract without unproductive repetition and delays.

In fact, JCT are leading in this area with their own suite of partnering contracts, the JCT - Constructing Excellence Contract family, which actively work to support the aims of collaborative contracting. In addition, the JCT 2024 edition contracts are now all subject to a Collaborative Working article in the main contract document recognising the importance of this in effective outcomes. I should also take this opportunity to recognise JCT for ensuring that their full suite of documents are now fully gender-neutral in their drafting, an important inclusion step.

So, given the benefits that collaborative contracting can bring, what is the added value brought by inclusion and diversity to really move us forwards?

Let us first take a moment to consider what we mean by Diversity, Equity and Inclusion.

Diversity, equity, and inclusion are often grouped together because they are interconnected, and it is only in combination that their true impact emerges. But all these terms are also easily misunderstood. It's important to grasp the individual meanings and implications of each of these terms:

 Diversity refers to who is represented in the workforce. Some examples of diversity in workplaces include:

- Gender diversity: What makes up the composition of men, women, and nonbinary people in a given population?
- Age diversity: Are people in a group from mostly one generation, or is there a
  mix of ages?
- Ethnic diversity: Do people in a group share common national or cultural traditions, or do they represent different backgrounds?
- Physical ability and neurodiversity: Are the perspectives of people with disabilities, whether apparent or not, accounted for?

These are a few of the most common examples, but what is considered diverse can range widely. We tend to think about diversity in terms of things like racial diversity and gender diversity and ethnic diversity. The visible aspects of diversity. Those things are all important. But it's also important to have diversity in how people think, how people think can be driven by many factors and many which may be invisible.

The iceberg slide, shows some of the many more aspects of diversity that impact on how we receive, react to, process and respond to information, all of which will bring unique perspectives, although not visible these are equally important and bring a richness to our teams.

 Equity refers to the fair treatment for all people, so that the norms, practices, and policies in place ensure identity is not predictive of opportunities or workplace outcomes. Equity differs from equality in a subtle but important way. While equality assumes that all people should be treated the same, equity takes into consideration a person's unique circumstances, adjusting treatment accordingly so that the end result is equal. For example, consider the implications of equity when sourcing talent there's a real difference between equal and equitable. Suppose we said, 'All interns are created equal. We will pay them nothing.' The people who can afford an entire summer without getting paid are likely already coming from a position of privilege and will be able to take the internship, those from less privileged backgrounds may not be able to afford to take unpaid work and so will be ruled out of the internship – that is inequitable. If we want to have all the voices round the table, we need to ensure we are providing equity so as not to create inadvertent exclusion.

Inclusion refers to how the workforce experiences the workplace and the degree to which organizations embrace all employees and enable them to make meaningful contributions. If we recruit a diverse workforce, we must also strive to develop a sufficiently inclusive culture, such that all employees feel their voices will be heard—this is critical if we want to retain their talent and unlock the power of having a diverse workforce. For example, a lack of inclusion can manifest in workplace culture in the following way: the LGBTQ+community is underrepresented in the workplace, especially at more senior levels. As a result, many feel like an "only" at work and are more likely to experience microaggressions; they might feel unable to talk openly and comfortably about themselves, for example, or need constantly to correct assumptions about their personal lives, all of which impacts on their feelings

of inclusion and ability to bring their whole self to work and perform at their best.

Without diversity, equity and inclusion, so much of the opportunity that we seek to achieve with Collaborative Contracting will be lost. Collaborative contracting works because it brings different parties together, aligns perspectives, but gets the value from each unique perspective. But all three are needed to realise the potential of diversity of thought. Diversity identifies who we need at the table, equity ensures all the parties are at the table regardless of barriers and inclusion ensures that those voices are heard at the table.

Let's bring this to life with a real example:

A Contractor has been commissioned to build a large army barracks including junior ranks living accommodation.

Under a traditional form of contract, drawings would be prepared and then sent to the Client's Project Manager for approval. The Client's project manager was made up of industry professionals and some ex-forces representatives. Although a slightly longer process, drawings would get approved, construction completed, and the building handed over.

However, post-occupancy evaluations showed that the soldiers complained of cramped living accommodation, leading to low morale and satisfaction, this in turn caused dissatisfaction with the Commanding Officers, frequent complaints, loss of

reputation for the Client's Project Manager and the Contractor and the soldiers' ability to perform at their best whist carrying out their vital roles.

Let us now reimagine the scenario with a collaborative form of contract with a contractual commitment to co-operate and act in good faith.

This time outputs, specifications and drawings are prepared in a collective problem-solving way, with collaboration and workshops, end-users and specialists are included and there is an agreement for an incentivisation based on end-user satisfaction, yet once again the same issues arise – cramped conditions, complaints. Loss of reputation and this time financial penalties. So, what is going wrong?

Finally, let us now consider the collaborative form, but one where there is a culture of inclusion and diversity. This time the collaborative working group includes <u>all</u> the end-users from junior ranks to commanding officers.

Inclusion training is given to all involved, an open culture of mutual respect and transparency is established, those involved are focussed on project outcomes, mechanisms are put in place to not reach decisions until all points of view are assessed and considered. Hierarchy is put to one side as project value is given priority. During one of the workshops the problem is revealed.

The original space-optimised design included a large basement storage area for the soldier's equipment – spare uniforms, backpacks, bedding are all kept there.

During one of the design collaboration meetings one of the junior rank soldiers speaks up "well of course I don't keep my stuff down there – I keep it in my room in case it gets nicked!", after careful questioning it was revealed that all the soldiers do this. They are all subject to regular kit inspections, if any kit is missing or damaged, there is a heavy penalty for the soldiers, and they also must pay to replace it. A communal storage area provides too much temptation for any solider who has kit missing to steal it from someone else – so all of the soldiers keep their kit in their room to avoid this.

The inclusive culture allowed the junior ranks soldier to speak up and admit this in front of senior officers without recriminations, the collaborative contracting model gave him the forum to do this. With all the participants there, the designers quickly changed the design to allow for individual storage in each room and got rid of the communal area, the design change was approved by the Project Manager because they could clearly see the value-add benefit, and it resulted in a happy end-user and customer, and reward and recognition for all the contracting parties.

By leveraging the strengths of both inclusion and diversity initiatives and collaborative contracting methods, businesses can achieve not only better social outcomes but also tangible economic benefits that contribute to long-term success.

Contracting has come a long way since the late 80s, we do, without doubt, work in safer environments, deliver projects that contribute positively to the environment, we have come on in leaps and bounds in terms of technology and digital, and there has without doubt been a shift to value creation.

How we contact is considerably more collaborative, we are achieving better outcomes for our customers and our wider stakeholders, our working environments on projects are cleaner, more collaborative and we are more inclusive – what we really need to do now is to accelerate our performance. I genuinely believe that the combination of Inclusion and Diversity with Collaborative Contracting is the move that can help us to achieve that step change.

Thank you