COLLABORATIVE CONSTRUCTION CONTRACTS: OPPORTUNITIES AND CHALLENGES FOR THE ENERGY SECTOR IN CANADA

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In recent years, construction projects across Canada have encountered significant challenges, not the least of which include a global pandemic, disruptions in the supply chain, environmental disasters, geopolitical conflicts, war, protests, volatile financial conditions, and the ever increasing time and cost associated with dispute resolution. These challenges have contributed to a scarcity in competitive and reliable pricing under traditional project risk profiles in some regions and sectors.

Canadian construction industry stakeholders are increasingly interested in collaborative contracting models like early contractor involvement, progressive design build, integrated project delivery, and alliance models. These models aim to achieve on budget and on schedule project completion, while minimizing disputes and incentivizing cooperative behaviours. Major projects in Ontario and British Columbia are proceeding under collaborative contracting models.

Meanwhile, the energy sector in Canada appears to be one of the few industries slow to adopt collaborative contracting models. It is common to see traditional fixed price or cost-plus design-build or engineering, procurement, and construction contracts on large industrial projects, particularly in Alberta. But the energy sector is not immune to the market factors shifting the tides in various other construction sectors in Canada. If energy projects wish to continue to attract bids from an experienced and varied pool of potential participants, including international players, and take advantage of some innovative contracting strategies, change may be warranted.

This paper assesses the features and suitability of these collaborative contracts for the construction of energy related projects in contrast to more traditional delivery models. In evaluating these models, the authors provide commentary on their risks and benefits and identify relevant opportunities for the energy sector in Canada to embrace collaborative construction contracting models.

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I. INTRODUCTION TO COLLABORATIVE CONSTRUCTION CONTRACTS

The goal of every construction contract is to deliver the highest quality asset while staying on budget and on schedule. Collaborative contracts have recently seen a resurgence in popularity in both Canada and the world at large. Sparked by a series of meaningful local and global challenges, these types of contracts emerged to provide a number of opportunities for project delivery. Many industries and sectors found uses for collaborative contracts, or elements thereof, to share risk and obtain superior pricing and quality. Certain sectors in the energy industry, particularly oil and gas, however, do not appear to be adopting these models at the same rate.

Collaboration in contracting aims to encourage parties to work together to achieve a common outcome, while recognizing that each party has a different commercial objective. There are real-world examples of these contracts being used on significant projects, including, for example, the Union Station Enhancement Project,² the Cowichan District Hospital Replacement Project,³ and the Vernon Active Living Centre Project.⁴ Collaborative contracts, however, are not without their own challenges and risks. They are characterized by a fundamental behavioural shift and are designed to bring about cooperation, teamwork, a shared vision for project success among the contracting partners, and, in some instances, a prohibition on legal claims.

This paper explores some issues with traditional contract delivery models and characteristics commonly seen in energy related construction contracts. Next, it describes collaborative contracting models and examines their benefits. This paper then highlights the types of projects that are suitable for collaborative contracts and reviews some success stories. Lastly, this paper evaluates challenges in implementing collaborative contracts and identifies opportunities for the energy sector.

This paper is intended to provide a helpful framework and introductory foundation to allow industry participants to make informed decisions when evaluating project delivery models for their energy projects.

² Infrastructure Ontario, "GO Rail Expansion – Union Station Enhancement Project", online: *Infrastructure Ontario* https://www.infrastructureontario.ca/en/what-we-do/projectssearch/go-rail-expansion---union-station-enhancement-project/ [Infrastructure Ontario] (Union Station is the major transit hub in the City of Toronto.

- This upgrade project, which includes the construction of a new platform and concourse area, will implement an
- alliance contracting method to expand the GO Transit rail service and has a target cost of \$562 million CAD).

³ Infrastructure BC, "Cowichan District Hospital Replacement Project", online: *Infrastructure BC*

<https://www.infrastructurebc.com/projects/projects-under-construction/cowichan-district-hospital-replacement-project/> (The Cowichan District Hospital Replacement Project will result in the design, construction,

⁴ City of Vernon, "Active Living Centre Project", online: City of Vernon < https://www.vernon.ca/parks-

commissioning, and activation of a new hospital to serve a diverse population and set of communities on Vancouver Island, will implement an alliance contract method, and has a target cost of \$1.45 billion CAD).

recreation/active-living-centre> (The Vernon Active Living Centre Project will result in the design and construction of a multi-purpose recreational facility in Vernon, British Columbia with a target cost of \$121 million CAD. Vernon City Council has endorsed using an Integrated Project Delivery process to develop the facility).

II. TRADITIONAL DELIVERY METHODS

The traditional approach to project delivery purports to provide value for money based on competition in a free market, low administrative costs, and certainty of price and schedule.⁵ This approach includes procuring tenders through a competitive bidding process based on an established scope of work and a risk allocation formulated by the owner, often with little to no room for negotiation. Common models in this category include design-bid-build ("DBB"), design-build and engineering, procurement, and construction ("EPC") contracts, where the cost of completing the work and the time in which to do it are fixed. A variation of EPC adds a construction management element, creating an engineering, procurement, construction, and management ("EPCM") arrangement where, although the price may not be fixed at the outset, the construction manager is responsible to engineer and procure the project, and often arranges for the performance of construction on behalf of, and as agent for, the owner.

Traditional delivery methods are often most popular when the market is owner-favourable with the presence of many qualified contractors, fewer opportunities, and predictable domestic and global markets.⁶ In an owner-favourable environment, contractors are usually prepared to apply a slimmer contingency to risks to win work. Where the conditions are more contractor-favourable, owners may find it difficult to attract an adequate number of interested bidders. If the proposed risk profile for the project is heavily weighted in favour of the owner, there may simply not be enough bidders who submit bids or those who do participate may price those risks exorbitantly. As discussed in section IV.5, the Alberta energy industry is forecasting a busy time ahead,⁷ which suggests that contractor-favourable market conditions may be here to stay for some time.

While traditional delivery models continue to, and always will, play a role in the construction industry due to their features and familiarity in use, they come with a number of inherent challenges and problems.

1. Traditional Contracting Models

The traditional approach to project delivery is commonly pursued through the following contract structures:

(a) <u>Design-Bid-Build (DBB)</u>

In a typical DBB arrangement, the owner engages a consultant who works with the owner to develop a design for the project.⁸ The consultant will act on the owner's behalf for the duration of the project, is responsible for the design, and will engage or manage any speciality sub-consultants,

⁵ Nick Saxton, "Considerations for Collaborative Procurement and Contracting" (20 October 2022), online: *Russell McVeagh* https://www.russellmcveagh.com/getmedia/c11cda2f-075c-40bd-ba39-774a35436e28/What-s-on-the-Horizon-Article-3.pdf/> [Saxton].

⁶ Andrew Chapman, "Challenges for Project Sponsors in the Current International EPC Market" (2007) 2:2 Construction L Intl 5 at 5 [*Chapman*].

⁷ Alberta Energy Regulator, "ST98: Alberta Energy Outlook – Capital Expenditures" (May 2022), online: *Alberta Energy Regulator* <a href="https://www.aer.ca/providing-information/data-and-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statistical-reports/statisti

⁸ Gabriel Jobidon et al, "Comparison of Quebec's Project Delivery Methods: Relational Contract Law and Differences in Contractual Language" (2019), online: *CanLII* [Jobidon]">https://canlii.ca/t/sllk>[Jobidon] at 16.

as necessary. Upon sufficient advancement of the design, the owner goes to market to engage a general contractor to execute the design. This is commonly done through a competitive bidding process. Upon selection of a general contractor, construction begins. During project execution, the consultant inspects the work, reports on deficiencies, and vets progress invoicing. The general contractor is solely responsible for the means and methods of construction and must engage and manage all subcontractors and suppliers to complete the project, usually for a fixed price or a not-to-exceed price (referred to as a "Guaranteed Maximum Price" or "GMP").

The DBB process is linear and sequential.⁹ It commences with a design phase, moves into a tender/bid phase, and then ends with completion of the construction and warranty phase. The owner can be heavily involved during the design phase, but there is little required of it during construction. The scope and quality of work are defined in detail during the design process. Subject to the accuracy of the design work and the predictability of the market, this model provides the general contractor with a strong foundation upon which to develop a reliable cost and schedule for the work.

(b) <u>Design-Build and Engineering Procurement and Construction</u>

In a typical design-build model, the owner initiates the project through a single contract for the supply of both design and construction.¹⁰ While there is a distinction between the design services and the construction work, from the owner's perspective it contracts with a single entity for both.

The owner usually initiates the project by preparing its "statement of requirements", which captures the performance requirements and standards that the design and construction must meet.¹¹ The owner then engages a design-builder to bring the design and construction to fruition. The design-builder is responsible for both the design and the construction, and must engage and manage all subcontractors, sub-consultants, and suppliers to complete the project.

While the owner is often entitled to approve the design, this method limits the owner's control over the design and the design-builder is engaged very early on in the formulation of the project. The contract often requires a payment certifier or owner's advisor to vet progress invoices and confirm for the owner what amounts are properly owing based on the percentage of the project completed or that pre-agreed milestones have been reached. Owners also often engage a separate consultant of their own to monitor quality and progress on the project.

Similarly, EPC contracts are also a traditional delivery model.¹² An EPC contract differs from a design-build contract in that the asset to be completed is often of a highly technical nature such that the design process is significantly more complex and completing the work will regularly include detailed commissioning and testing procedures. The highly technical nature of EPC contracts means that it is often preferable for the performance requirements and Front-End

⁹ John Haythorne & Mollie Deyong, "Fairness and Transparency in Large Project Public Procurement" (2018) J Can C Construction L 59 at 74-75 [*Haythorne & Deyong*].

¹⁰ Brian M Samuels & Doug R Sanders, *Practical Law of Architecture, Engineering, and Geoscience*, 3rd ed (Toronto: Pearson Canada, 2016) at 111.

¹¹ David I Bristow, QC & Jesmond A Parke, "An Overview of Three Commonly Used Construction Contracts — Stipulated Price Contract, Construction Management, and Design-Build" (2000) 49 Construction L Reports Arts 265.

¹² WJ Kenny, QC, "Risk Allocation in Design Build Contracts" (2001) 7 Construction L Reports Arts 31.

Engineering Design ("FEED") to be developed prior to obtaining bids for the execution phase of the project.¹³ The FEED can be done under a separate agreement by an EPC contractor or a specific engineering consulting firm. While the main EPC work is competitively tendered, the engineering firm or EPC Contractor that was hired to do the FEED work is also given the opportunity to bid. EPC contracts are regularly characterized by key performance indicators and performance benchmarks that must be met. Failing to meet these metrics typically provide the owner the right to enforce liquidated damages or withholdings, which can lead to a formal or informal dispute resolution process in respect of such claims.

(c) <u>Construction Management or Engineering, Procurement, Construction, and</u> <u>Management (EPCM)</u>

In a construction management arrangement, the owner engages a designer who retains responsibility for the design. The owner then separately engages a construction manager who supervises, coordinates, and inspects the work of the trades and generally administers the contract. The construction manager may perform certain limited scopes of work, usually under a separate agreement, but otherwise it does little to no actual construction. There are generally two variations to a construction management contract: (i) the construction manager serves as agent of the owner in managing the trade contractors; or (ii) the construction manager is "at-risk" and holds the subcontracts itself.¹⁴

In the first scenario, the owner engages a construction manager to oversee trade contractors as agent on its behalf, but the owner will contract directly with those trade contractors. The construction manager will act as a limited agent of the owner, providing advisory services and administering and overseeing the construction contracts between the owner and trade contractors. The construction manager ordinarily works on a fee for services basis.

Under this model, the owner retains the maximum degree of control over trade contractor and supplier selection and, where the owner has a robust supply chain function, it can leverage its own relationships to obtain preferred pricing. Additionally, in this arrangement, the construction manager assumes less responsibility for trade contractor performance because the owner directly contracts with those entities and is in the best position to enforce those agreements (with the construction manager's assistance when required).

In the second scenario, the construction manager is "at-risk" and holds the trade contracts itself (making the trade contractors subcontractors to the construction manager). Importantly, the "at-risk" label means that the construction manager, who holds the subcontracts, is responsible to pay the subcontractors for their work. This moniker does not necessarily mean, however, that the construction manager is at risk for the cost of their performance, which is in some instances still a cost that flows up to the owner.

In an "at risk" construction management contract, the parties enter into a contract for the completion of the project, but may not agree on an initial fixed or Guaranteed Maximum Price. While the expectation for owners is customarily that the owner and construction manager will eventually agree to a fixed price and schedule, and that the construction manager will be

¹³ Chapman.

¹⁴ *Jobidon* at pp. 16-17.

responsible for the subcontractors' performance, this is not always the case. This "at risk" model is explored in further detail below under section V.1.

If the construction manager is not prepared to accept, even where they are "at risk", the risk of guaranteeing cost and schedule for the project, this model creates challenges in enforcing quality and avoiding paying twice for deficient work. A further complication to the "at risk" model before price or schedule certainty are agreed, if ever, is how subcontractor or supplier abandonment or insolvency are treated with respect to those costs being recoverable by the "at risk" construction manager (see discussion of this concern under section II.3(g) below).

A variation of the EPC contract is an Engineer, Procurement, Construction, and Management ("EPCM") contract. EPCM contracts are often implemented where the asset being constructed is of a highly technical and complex nature. In an EPCM arrangement, the construction manager will often coordinate the engineering and procurement services and often act as the agent of the owner during construction.¹⁵ EPCM agreements are often implemented in the industrial sector for large, complicated projects where the scope is uncertain and the asset is too complicated to guarantee to the owner that it can be delivered on a specified schedule and for a specified price. Another driver for an owner to select an EPCM model is when the price contingencies under a traditional fixed price EPC contract are expected to be excessive.¹⁶

2. Traditional Pricing Models

The traditional contract structures must also be paired with a method of payment. The three most commonly implemented pricing models are: (a) lump sum or fixed price; (b) cost-plus or "time and materials"; and (c) unit price. Creative contracting parties can implement any number of combinations or variations of the foregoing in their contract. At their core, these pricing structures operate as follows:

(a) <u>Lump Sum or Fixed Price</u>

Under a lump sum or fixed price contract, the contractor agrees to perform a fully defined or sufficiently advanced scope of work for a fixed sum of money that is intended to include overhead and profit. As a result, the owner has little ability to direct the contractor during the construction without inviting a revision to the price. There is little to no transparency and the owner will have no line of sight to the actual cost of the work, as lump sum compensation provides essentially a single price without a further break down. Additionally, under a lump sum pricing regime, the owner regularly explicitly waives any right to audit the build-up of any fixed or lump price, as a result. Any changes to the work are also priced using a fixed or lump sum price. Subject to any owner assumed risks, such as unknown site conditions or changes driven by errors in design, requirements, or owner provided information, the contractor is responsible for cost overruns.

¹⁵ Phillip J Scheibel, "Understanding Construction Warranties in Canada" (2015) J Can C Construction L 137 at 155.

¹⁶ Owen Hayford, "Collaborative Contracting and Procurement" (2020), online: *DLA Piper*

<https://www.dlapiper.com/en/insights/publications/2020/10/dla-piper-collaborative-contracting-and-procurement-paper-2020> [*Hayford*] at Appendix 5.

Where a portion of the price cannot be fixed for specific services or materials, cash allowances may be used to estimate a price. Cash allowances often carve out a portion of the price for certain elements of the project that will operate on a cost-plus basis and, unless otherwise restricted, if the costs incurred exceed the cash allowance the contractor is entitled to payment for any overage. The portions of the price tied to cash allowances shift the risk of cost overruns for those elements back to the owner. As a result, owners are careful to agree to extensive cash allowances. Cash allowances are often granted, however, for seasonal items, long lead items, and materials that are subject to drastic price fluctuations (for example, lumber or steel).

(b) <u>Cost-Plus or Time and Materials</u>

Under a cost-plus or time and materials payment scheme, the contractor is reimbursed for actual costs incurred in performing the work plus a fee.¹⁷ The fee can be broken out into overhead and profit or be one all-inclusive amount. The fee may be calculated based on a percentage of the actual cost or be a fixed amount. The fee can and will often be subject to adjustment in accordance with a contractual change management process in the event of unanticipated conditions such as increased or varied scope or unexpected execution conditions that result in an overall increase in the total project costs.

Cost-plus or time and materials contracts often include two variations to shift some risk of price certainty back to the contractor: (i) a target price; or (ii) a Guaranteed Maximum Price or GMP. When the parties agree to a target price they will establish a target cost for all work. Work is then performed and at the completion of the project, depending on the arrangement, if the total project costs are less than the target price the cost savings may be apportioned between the parties. If the target price is exceeded, the owner is still responsible to pay any excess costs and the contractor loses its right to share in any excess profit tied to achieving the target price. Under a GMP, a maximum not-to-exceed price for the entire cost of the work is agreed between the owner and the contractor. Work is then performed on a cost-plus basis, but the owner pays no more than the maximum set by agreement, subject to the contractor's entitlements to increase the GMP based on the change order regime under the contract. The contractor is obligated to absorb any amount in excess of the GMP, but usually any cost savings are apportioned under the GMP in a similar fashion to a target price scenario.

(c) <u>Unit Price</u>

Under a unit price contract, the work is divided into defined items. Each item receives an estimated quantity and a price (i.e., unit price) outlined in the contract.¹⁸ The amount paid per unit is based on the actual number of units completed, multiplied by the agreed unit price. This model can be flexible as it allows for a contractor to account for fluctuating quantities without building in huge cost contingency, which would otherwise be the case in a lump sum. It also allows the owner to adjust scope, as necessary. In theory, this model also grants price certainty provided the estimated quantities are accurate and the defined units include all work required to satisfactorily construct the asset. There is also the option under this model to institute a formula for significant variations

¹⁷ Wise, Howard M. *The Manual of Construction Law*, (Toronto: Thomson Reuters) [2023] ProView at § 3:11 [*Wise*].

¹⁸ *Wise* at § 2.2.

in quantities. For example, the price may be higher for fewer units and then, by operation of the economies of scale, the price may decrease the more units that are purchased.

3. Problems Inherent to the Traditional Approach

While owners are all too often drawn in by the siren song of a fixed price and schedule, with uncontrollable risks assigned to contractors, there are meaningful limitations to the traditional approach.¹⁹ The intended benefits of the traditional approach are not always realized in execution. Some of the challenges and shortcomings that are common to the traditional method of project delivery are highlighted below.

(a) <u>Inherently Adversarial Nature</u>

Traditional methods of project delivery assign specific risks to specific project participants, thereby creating silos of responsibility and adverse interests.²⁰

In the DBB model the designer is responsible for completing the design and bears risk if the design omits an important detail or fails to comply with laws or design standards or specifications. Likewise, the general contractor is responsible for, and bears the risk of, all construction including performance by subcontractors. Subcontractors are meanwhile responsible to the general contractor for the quality and timeliness of their work but not for construction performed by others.

A contractor will generally be motivated to achieve the highest profit for the least output and assumption of risk.²¹ By contrast, an owner will aim to obtain the highest quality work for the lowest price. In some instances, as in a pure cost-plus contract, the contractor may even be motivated to increase the costs of the project to realize a higher fee. When inconsistencies, deficiencies, delays, or errors arise during the project, the participants are financially motivated to point the finger at one another to avoid responsibility and protect their profit.²² This is often reinforced by the fact that the project participants are evaluated on their individual performance and measured against their discrete responsibility, but not with respect to the project as a whole. These are inherently adverse interests.

While contractual duties of good faith and honest performance are ever-present,²³ and contractual terms requiring cooperation can be included in any agreement, these terms may be ineffective when a particular party must ultimately bear the cost and burden of a problem. Additionally, these problems are usually complex and the result of a number of contributing factors. If litigated, courts may face the difficult task of assessing how numerous discrete delays or changes, caused by varied parties, synergized and rippled through the project to cause resulting damages.²⁴ This is only

¹⁹ Hayford at 4.

²⁰ Matthew R. Alter et al, "Looking through Different Lenses: Tactical and Technical Concerns when Representing the Owner or the Contractor" (2019) 2019 J. Can. C. Construction Law. 249 at 250, 282.

²¹ Law Reform Committee, "Guide on Collaborative Contracting in the Construction Industry" (January 2022), online: *Singapore Academy of Law* https://www.sal.org.sg/sites/default/files/SAL-Documents/2022-

online: Singapore Academy of Law < https://www.sal.org.sg/sites/default/files/SAL-Documents/2022-

^{01/}Guide%20on%20Collaborative%20Contracting%20in%20the%20Construction%20Industry_consolidated.pdf>. ²² *Hayford* at 6.

²³ Bhasin v Hrynew, 2014 SCC 71 [Bhasin].

²⁴ Colin D Piercey, Jonathan M O'Kane & Jeffrey R Parker, "Cumulative Impact Claims: Not Just Another Delay Claim" (2022) J Can C Construction L 1 at 2-3.

further compounded by the fact that the hearing judge may not have experience in the construction industry.²⁵ Further, commencing legal proceedings to enforce an obligation to cooperate would likely come with very little, if any, actual remedy, as specific performance to cooperate is highly exceptional.²⁶ Lastly, a promise is only ever as good the person who gave it. Impecunious contracting parties are not worth pursuing. As a result, where a project participant has an isolated sphere of responsibility on the project, it may look to direct the blame away from its silo of responsibility whenever possible in order to defend its own bottom line.

These features disincentivize parties from resolving problems collaboratively and can pit the owner and non-owner participants²⁷ against one another.

Given the inherently adversarial nature of the traditional methods of project delivery, formal and informal disputes are common. Commercial negotiation to resolve disputes may reduce external spending for participants, however, the parties still devote considerable internal time and resources to make the best case against the other side. Resolving contractual disputes through arbitration or litigation is expensive, time consuming, and comes at an intangible cost to morale and corporate culture.²⁸ Further, no matter how favourable the facts and the law, there is always a chance that an arbitrator or a judge will come to an unexpected conclusion. The law is constantly evolving and project participants should always consider that it may be their dispute that leads to a new unanticipated, and potentially costly, development in the law.²⁹ Even if successful, there is the risk that the judgement amount is not available, in whole or in part, from the judgment debtor.

(b) <u>Not Always Best Value for Money</u>

Traditional delivery models may not provide best value for money for a number of reasons.

First, paying for a risk that may not occur on the project can, if the risk never arises, effectively become a premium paid to the project participant responsible for the risk. Similarly, whether mechanisms like liquidated damages actually incentivize positive behaviours is debateable. Non-owner entities may build a float into their pricing to account for a specific amount of these types of financial consequences and, in the event they are not triggered, they become a windfall.

Second, assigning risks to a contractor, particularly where those risks cannot be controlled and are very difficult to price, can result in a massive cost contingency being built into the price of the work.³⁰ Conversely, a contractor who has improperly and inadequately priced a risk can find itself in dire financial consequences where that risk, if realized, could eliminate all profit on a project.

²⁵ Harvey J. Kirsh, "Construction Claims and Disputes: Twists and Turns Along the Spectrum of Dispute Resolution" (2019) 2019 J. Can. C. Construction Law. 283 at 286-287.

²⁶ Heintzman, West & Goldman, *On Canadian Building Contracts*, 5th ed (Toronto: Thompson Reuters, 2023) [*Heintzman*] at § 9:8.

²⁷ (Non-owner participants are sometimes referred to as "NOPs".)

²⁸ Gerard J Kennedy, "The 2010 Amendments and Hryniak v Mauldin: The Perspective of the Lawyers Who Have Lived Them" (2020) 37:1 Windsor YB Access to Just 21.

²⁹ Bhasin.

³⁰ Haythorne & Deyong at 77-78.

Even worse, in some instances, those risks can be so significant that a contractor is "betting the company"³¹ on the risk, even where the owner has accepted an exorbitant price.

Third, fixed-pricing often incentivizes minimum performance.³² As noted above, contractors may be motivated to realize the best possible financial outcome for the least amount of work and risk. Contracting on a fixed price discourages a contractor from supplying more than the contractual minimum, even where doing so could result in achieving meaningful efficiencies under other scopes. Where a design deficiency surfaces and a contractor is entitled to a contractual change as a result, the contractor may be incentivized to recommend a solution that is the most profitable and least risky for itself, as opposed to a solution that may cost less, but creates some potential risks under its silo of responsibility. As another example, where a potential change to a specification could cost one contractor more to complete its scope, but result in a significant reduction in the cost to complete another contractor's scope, the affected contractor may never agree. That would, under a fixed price regime, simply result in providing a better financial return to a third party.

Fourth, there is no incentive in fixed price work to complete the work where there is no contractual relief and the work has unexpectedly become so costly that the contractor is better off abandoning the work. This is related to the type of high stakes win or lose risk allocation mentioned above and can result in circumstances where contracting entities simply walk away mid project, regardless of the financial consequences, as there is no longer any way to achieve success on the project. While there is often recourse to pursue a contractor for the loss and damages suffered in the circumstances, the reality is that collecting on these claims would be costly and time consuming,³³ and where insolvency interrupts the claims process, the owners rights may be further limited.³⁴ Even where performance security, such as bonding, is in place there is rarely a quick payout at the end of a major default.³⁵ Moreover, contractor abandonment, insolvency, and pursuing a claim, while requiring a significant output of capital, contribute nothing to the actual asset being constructed.

(c) <u>Changes Can Lead to an Open Season on Adjustments to Cost and Schedule</u>

In many circumstances, under traditional methods of project delivery, failure by one party to perform will create an opportunity for other project participants to adjust the cost and time to perform their own scope.³⁶ While not widespread in the Canadian construction industry, there may be certain project participants banking on charging higher than normal prices on resulting changes in scope, in order to recapture some of the profit they intended to make at the outset but did not

³⁴ Rebecca Cleary, "Bankruptcy Issues in Construction" (October 1, 2015), online: *Alexander Holburn* https://www.ahbl.ca/bankruptcy-issues-in-construction/>.

 ³¹ Esquire Deposition Solutions, "What's driving bet-the-company litigation?", online: *Esquire Deposition Solutions* ">https://www.esquiresolutions.com/whats-driving-bet-company-litigation/>; Justice Leonard Ricchetti & Timothy Murphy, *Construction Law in Canada* (Toronto: LexisNexis Canada, 2010), Canadian Current Law, Issue 1104.
 ³² Ole Johnny Klakegg, Julian Pollak & Lynn Crawford, "Preparing for Successful Collaborative Contracts" (2020)

^{13:1} Sustainability 289 at 2.

³³ See, for example: Steven Shavell, "The Judgement Proof Problem" (1986) 6 Intl Rev L & Econ 45 at 45.

³⁵ Stephen A. Hess, Esq, "Termination American Style: Handling the Acutely Troubled Construction Project" (2013) 63 J Can C Construction Law [*Hess*] at 102; see also *Heintzman* at § 15.1.

³⁶ Law Reform Committee, "Guide on Collaborative Contracting in the Construction Industry" (January 2022), online: *Singapore Academy of Law* https://www.sal.org.sg/sites/default/files/SAL-Documents/2022-

 $^{01/}Guide \% 20 on \% 20 Collaborative \% 20 Contracting \% 20 in \% 20 the \% 20 Construction \% 20 Industry_consolidated.pdf >.$

include in their initial bid, in order to gain a competitive advantage during procurement.³⁷ Depending on how far the project has progressed, and how integral to cost and schedule the changed scope of work is, a project participant may even find itself in a situation where it can or must charge well above what it would have otherwise been able to obtain. This is because it is usually not realistic for an owner to take the time to obtain a separate contractor for, and integrate that contractor's work into, the project once construction is considerably advanced. From a less pessimistic point of view, this increased pricing may also simply be a result of the fact that the work must now be done under different conditions. The work may now need be done in a different season or the cost of the specified materials may have significantly escalated since initial contract award.

(d) <u>Trying to Run Before You Can Walk</u>

Where time constraints require that an owner commence construction before the design is sufficiently progressed, complications can arise. Frequently referred to as "fast tracking", where the design phase, tender phase, and construction phase that would have normally been completed sequentially are instead run, to varying degrees, in parallel.³⁸ Delivery models like a design-build or construction management contract can proceed on this basis, but usually with a corresponding cost-plus payment structure, as attempting to provide price certainty is virtually impossible with an incomplete design or specifications.³⁹ The further along and more integrated a project participant becomes the more dependant upon them an owner will become and the more leverage that project participant will have with respect to its pricing and acceptance of risk.

Even where there is time to run a sequential process, owners will often develop the project with consultants alone. As a result, an owner may have limited meaningful input from supply chain professionals during the development of the scope and risk profile for a project. A construction manager may be engaged early to provide advice, as will be discussed in greater detail below in section V.1, but this still creates a challenge with respect to leverage and bargaining power. Further, an owner engaging a construction manager for early advice, but not proceeding with that construction manager, may risk a negative perception in the market. It could discourage robust participation in later procurement processes seeking to obtain a new construction manager or contractor for the execution of the work. Thus, under traditional delivery models an owner is often going to market without input from key project participants.

(e) <u>Re"Claim"ing a Margin</u>

In a traditional contracting scenario procurement is done in a competitive environment, where parties are running on a thin margin to stay competitive.⁴⁰ This may create a pressure cooker where bidders are motivated to advance claims through litigation or arbitration against the owner, either during or after the performance of the work, to improve their financial outcome. At times, these

³⁷ David Debenham, "Construction Fraud" (2012), 14 CONSTRLR-ART 4 at 1, 2.

³⁸ Hayford.

³⁹ Danny Haines et al, "Feasibility of Lump Sum Contracts in the Oil and Gas Industry of Alberta" (June 2018), online: *Canadian Society for Civil Engineering*

<https://csce.ca/elf/apps/CONFERENCEVIEWER/conferences/2018/pdfs/Paper_GC102_0607030806.pdf> [*Haines et al*] at 2.2.

⁴⁰ *Hess*, at 63; see also *Heintzman* at §3.1.

claims can even be without merit, but the economics of disputes are such that even claims without merit are often cheaper to settle than to litigate or arbitrate to a conclusion.⁴¹

Additionally, where excessive risk has been transferred to a non-owner participant, absorbing the cost of that risk and meeting the contractual obligations may be so significant that a non-owner participant is better off abandoning or breaching the contract and either taking its chances in court or initiating bankruptcy proceedings, which will stay proceedings.⁴² This can lead to some creative *ex post facto* legal arguments intended to undermine and create doubt in what might have otherwise been mutually understood terms at the outset. There are, of course, reputational and business risks in taking this approach to contracting, but that does not change the fact that it has been known to occur and is, in some contract forms where there is little to no accommodation otherwise, perhaps the only resort.

(f) <u>Conflicts of Interest</u>

In some traditional models of project delivery, including both a design-build and EPC delivery models, there is a risk that the designer or engineer finds itself in a conflict of interest. This can arise because of the design-builder entity, which can be comprised of professional architects and engineers who created the design, being required to act both as designer and contract administrator during execution.⁴³ The outcome of the design-builder's decisions in evaluating the work for compliance with the design may have a direct impact on its financial reward. This challenge is further exacerbated where the consultant has been subcontracted to the builder and is being paid directly by the entity overseeing and performing the construction work. Returning to the inherently adversarial nature of traditional contracting methods addressed above, the design-builder in this scenario is caught between accepting responsibility for the design error, and corresponding cost consequences, or potentially looking for avenues to shift the blame outside its silo of responsibility. Of course, professional architects and engineers have to meet professional codes of conduct precluding acting contrary to their clients' interest, providing some welcome comfort to owners, nonetheless creating an interesting challenge that must be managed.

(g) <u>Costs of Subcontractor or Supplier Default, Insolvency or Abandonment</u>

A contractor under a cost-plus arrangement or a construction manager at risk will, notwithstanding that it holds the subcontracts, often attempt to negotiate a carve-out for unrecoverable costs it suffers associated with the default, insolvency, or abandonment of a subcontractor or supplier.⁴⁴ The default language of the standard form CCDC 5B Construction Management contract and

⁴¹ Erik S Knutsen, "The Cost of Costs: The Unfortunate Deterrence of Everyday Civil Litigation in Canada" (2010)
36 Queens LJ. 113 at 157-158; see also *Olyan & Taylor* citing Howard M. Wise, "Risk Allocation — In

Design/Build — The Owner's Perspective" (paper presented at the Construction Risk Management Conference, 25 November 1998) (Toronto: Federated Press, 1999) at 6.

⁴² Anthony Ruffolo, "Legal Pitfalls of Doing Business in the Construction Industry in Canada" (2010) 86 Construction L Reports Arts 13, at VIII.

⁴³ Andrea Lee & Markus Rotterdam, "One Person, Two Hats–The Dilemma of the Design Professional" (2020) J Can C Construction L 51 at 70-71.

⁴⁴ Nicholas Dennys & Robert Clay, *Hudson's Building and Engineering Contracts*, 14th ed (London: Sweet & Maxwell, 2020) [*Hudson's*] at 707.

CCDC 3 Cost Plus contract renders these costs reimbursable by the owner.⁴⁵ Where this carve-out forms a part of the contract, the contractor will suffer no financial loss if costs arise as a result of subcontractor or supplier default, insolvency, or abandonment. These costs can, for example, include the cost to correct defective work where the subcontractor does not honour its performance obligations in the subcontract.

This is problematic for a number of reasons. First, those costs may in some instances actually increase the contractor's fee. As the reimbursable costs increase so too does the fee to which the contractor is entitled. Further, in that scenario, neither the owner nor the contractor have a contractual claim for damages against the subcontractor for poor performance. The owner has no privity of contract with the subcontractor or supplier and the contractor suffers no loss for subcontractor default, insolvency, or abandonment as this is a compensable cost.⁴⁶ Thus, the contractor has no damages to pursue against the subcontractor or supplier.⁴⁷ This can leave the owner at risk of having no recourse. There is an opportunity to mitigate this risk through bonding or letters of credit, but this issue is something the parties need to carefully assess and manage during the project.

III. COMMON CHARACTERISTICS OF ENERGY RELATED CONTRACTS

Though difficult to generalize, energy projects tend towards a traditional risk profile and pricing structure. Canadian oil and gas related construction contracts are perhaps most notably entrenched in traditional models like DBB, design-build, and construction management contracts on a cost-plus or lump sum payment regime.⁴⁸

While there are few "standard form" energy contracts universally accepted in the industry, and those standard form contracts that do exist are often customized for each specific project, the Construction Owners Association of Alberta (COAA) publishes a form of EPC contract for use on energy projects. In reviewing the COAA EPC contract, and commentary on energy related contracts more generally, they can be observed to:

- implement traditional contracting models;⁴⁹
- maintain traditional rights with respect to indemnity and claims for loss or damage;⁵⁰
- proceed under a fixed price or cost reimbursable payment regime;⁵¹

⁴⁵ Canadian Construction Documents Committee, "CCDC 5B – 2010 Construction Management Contract", online: *Canadian Construction Documents Committee* [*CCDC*]">https://www.ccdc.org/documents/>[*CCDC*] at Article A-7.

⁴⁶ Laura Baron, "Privity of Contract in The Construction Industry" (2008) 72 CONSTRLR-ART 170.

⁴⁷ *Hudson's* at 1062.

 ⁴⁸ COAA Major Projects Performance Assessment System Project Performance Engineering Productivity Construction Productivity, Version 1.0, May 2019 [*COAA*], at pp.1, 11, 45; see also Charles M. Sink, "Mega Project Construction Contracts: An Owner's Perspective," 55 Rocky Mt. Min. L. Inst. 21B-1 (2009) at 21-B-2.
 ⁴⁹ COAA, at pp. 11.

⁵⁰ COAA EPC Contract (2005), Article 41; Arnold H Olyan & John K Taylor, "The EPC Contract and the Energy Lawyer" (2007) 44:3 Alta LR 539 [*Olyan & Taylor*] at 565.

⁵¹ *COAA* at p.11.

- implement liquidated damages upon the failure of the contractor to realize on specified criteria or upon a defined occurrence (for example, changes in key personnel or delayed completion can often result in defined liquidated damage payments);⁵²
- seek to exclude the owner's liability for documents provided by the owner, the owner's review and approval of any documents prepared in the course of performing the work, or even the owner's review and approval of work performed;⁵³ and,
- generally aim to assign risk to the contractor.⁵⁴

While most oil and gas related construction projects in Alberta were reported to proceed under a cost-plus model, research indicates there is an appetite for lump sum pricing that may arise out of a perception that it can, in theory, transfer risk away from owners or that financial institutions prefer to finance large oil and gas projects priced on that basis, as they see their investment better protected by this contract type.⁵⁵ However, attempting to transfer all risk to the contractor typically does not result in lowering risk of cost overruns, and cost reimbursable contracts, as above, may not incentivize cost savings and other efficiencies.⁵⁶ Alberta-based oil and gas construction projects have been found to incur more significant cost overruns than other comparable projects in the United States and inappropriate contracting strategies is a contributing factor.⁵⁷

The exploration and production of Alberta's oil and gas resources has historically been subject to a boom and bust cycle, but cost overruns and high activity have presented meaningful challenges in attracting further development.⁵⁸ Given the recent surge in renewable energy projects in Alberta,⁵⁹ with the expected continued growth in more traditional oil and gas related work,⁶⁰ and the trends in local and global markets (discussed below), there may be many fruitful upcoming opportunities for energy industry stakeholders to explore the benefits of more collaborative contracting.

⁵² COAA EPC Contract (2005), Article 21; *Olyan & Taylor*, at 551.

⁵³ COAA EPC Contract (2005), Articles 4.10, 5.3, 16.1, 17.7; *Olyan & Taylor*, at 558.

⁵⁴ *Haines et all* at 2.1.1.

⁵⁵ *Haines et al*, at 2.1.1, 5.1.

⁵⁶ Haines et al, at 2.1.1; see also COAA at 63.

⁵⁷ Haines et al, at 1; see also COAA at 14.

⁵⁸ *Haines et al*, at 1; see also *COAA* at 3.

⁵⁹ Chris Varcoe, "Varcoe: 'A Rush in Alberta' – Province sees flood of renewable projects with more growth to come" (October 26, 2022), online: *Calgary Herald* https://calgaryherald.com/opinion/columnists/varcoe-a-rush-in-alberta-province-sees-flood-of-renewable-projects-with-more-growth-to-come>; Alberta Electrical System Operator, "Alberta's Power System in Transition" online: *AESO* < https://www.aeso.ca/future-of-electricity/albertas-power-system-in-transition/.

⁶⁰ Government of Alberta, "2023 Budget – Economic Outlook", online: *Alberta.ca* https://www.alberta.ca/economic-outlook.aspx.

IV. TRENDS LEADING TO COLLABORATIVE CONTRACTING IN THE GLOBAL PUBLIC MARKET PLACE

In recent years, a series of events have exacerbated the challenges regularly encountered in traditional project delivery models.⁶¹

1. Covid-19

The Covid-19 pandemic highlighted key weaknesses in the traditional fixed price contracting model.⁶² Price escalation for materials, changes in laws, and shut downs were among only a few of the effects the Covid-19 pandemic had on the construction industry. While the fixed price model did not withstand the unpredictability and pressures of the pandemic, the industry itself demonstrated an ability to work collaboratively. Project stakeholders responded quickly and flexibly to the challenges of the pandemic and worked collaboratively to address issues such as delays due to global supply chain, workforce illnesses, and new governmental health and safety requirements, and shutdowns.

The practices during the pandemic demonstrated that the construction industry has space for collaboration and project stakeholders are able to engage in collaborative problem solving to the benefit of their project. The pandemic has ushered in a new wave of interest in collaborative contracting for construction and infrastructure projects. Some authors have even coined Covid-19 as serving as a "Proof of Concept" for collaborative contracting approaches.⁶³

As governments are looking to encourage revitalization of their economies through spending on infrastructure and "Build Back Better"64 in the wake of the pandemic's devastation, the collaborative contracting model allows an expedited process. The faster the shovels are in the ground the better. Consequently, the time-consuming linear and sequential process of DBB is not always possible.

2. **Supply Chain**

While the immediate impacts of Covid-19 on construction projects were obvious, the longer-term effects such as supply chain disruption have also demonstrated how collaborative contracting is better positioned to deal with uncertainty. Covid-19 alone is not the only issue challenging the supply chain.⁶⁵ Supply chain disruption can be a result of several events, and the continued supply chain turmoil are a reminder of the vulnerability and unpredictability of our globally integrated

⁶¹ Zena Olijnyk, "Infrastructure trends – cost and completion models evolving to reflect current realities" (Lexpert of Business Law) May 23, 2023, online: https://www.lexpert.ca/special-editions/infrastructure/infrastructure-trendscost-and-completion-models-evolving-to-reflect-current-realities/375956> [Olijnyk] ⁶² Oliinvk.

⁶³ Anne-Marie Friel & Laura Tetlow, "Collaborative contracts make supply chains more resilient to crises" (December 16, 2020), online: Pinsent Masons LLP https://www.pinsentmasons.com/out-

law/analysis/collaborative-contracts-make-supply-chains-resilient-crises>.

⁶⁴ The White House, "The Build Back Better Framework: President Biden's Plan to Rebuild the Middle Class", online: The White House < https://www.whitehouse.gov/build-back-better/>.

⁶⁵ Neil Bullen, "International construction market survey 2022: A disrupted recovery", online: Turner & Townsend <https://www.turnerandtownsend.com/en/perspectives/international-construction-market-survey-2022/>.

supply chains.⁶⁶ Moreover, a significant lack of skilled trades in Canada creates additional bottlenecks for development.⁶⁷ The Government of Canada, among others, is acutely aware of this challenge and anticipates that an average of around 75,000 new apprentices must be hired each year for the next five years to meet the demand.⁶⁸

It is imperative that contracts are able to adapt to the ever-changing reality of supply chain logistics and price increases. Fixed price contracts are rarely structured to accommodate unanticipated issues and recent years have made it clear that any number of unpredictable factors can greatly impact projects. It is likewise unrealistic to expect owners, even where they may be capable of doing so, to absorb every fluctuation and risk. Instituting mutual responsibility and shared stewardship ensures proper mitigation and cost control.

3. Inflation

The International Monetary Fund ("IMF") reports inflation will fall to 7.0 percent in 2023 from 8.7 precent in 2022.⁶⁹ It also predicted in January 2023 that inflation may drop as low as 4.3 percent in 2024,⁷⁰ which is notably still above pre-pandemic levels. However, the IMF revised its prediction at the end of the first quarter of 2023, predicting that 2024 was more likely to see 4.9 percent inflation.⁷¹ Either way, the IMF reports that inflation is much "stickier" than anticipated and although recent headlines indicate that inflation may be declining, core inflation, excluding the volatile energy and food components, has not yet peaked in many countries.⁷² Further, the Bank of Canada suggested inflation in Canada had eased to 4.3% in March 2023, but this was still noticeably higher than its 2% target and there is no guarantee inflation will continue to ease.⁷³ Regardless of whose predictions are most accurate, inflationary prices and unevenly rising costs will reduce the purchasing power of owners.⁷⁴ This will threaten margins and drive up the cost of bids. In such an environment, opportunities to obtain good value for money are important and traditional contracting methods may be inadequate to respond to unpredictable financial circumstances.

⁶⁶ Eike Ebel et al, "Overcoming Barriers to Multitier Supplier Collaboration" (July 7, 2021), online: *McKinsey & Company* https://www.mckinsey.com/capabilities/operations/our-insights/overcoming-barriers-to-multitier-supplier-collaboration [*Ebel et al*].

⁶⁷ Professor Doug Jones, AO, "Collaborative Solutions in Construction: Rising to the Challenges Facing International Construction" (2023) J Can C Construction L 1 [*Jones*] at para 1.1.

⁶⁸ Government of Canada, "Government of Canada promotes in-demand skilled trades as a first-choice career path" (January 31, 2022), online: *Government of Canada* https://www.canada.ca/en/employment-social-development/news/2022/01/skills-trade.html.

⁶⁹ International Monetary Fund, "The outlook is uncertain again amid financial sector turmoil, high inflation, ongoing effects of Russia's invasion of Ukraine, and three years of COVID" (April 2023), online *International Monetary Fund* < https://www.imf.org/en/Publications/WEO/Issues/2023/04/11/world-economic-outlook-april-2023> [IMF].

⁷⁰ International Monetary Fund, "Global inflation will fall in 2023 and 2024 amid subpar economic growth" (January 2023), online: *International Monetary Fund*

https://www.imf.org/en/Publications/WEO/Issues/2023/01/31/world-economic-outlook-update-january-2023. ⁷¹ IMF at xiv.

⁷² IMF at xiv.

⁷³ Tiff Macklem, "Getting inflation back to 2%" (May 4, 2023), online: *Bank of Canada*

https://www.bankofcanada.ca/2023/05/getting-inflation-back-to-2/.

⁷⁴ The Constructor: Building Ideas, "How does Inflation Affect Construction Industry?" (May 2023), online *The Constructor* ">https://theconstructor.org/construction/inflation-affect-construction-industry/565090/

4. Lack of Bidders

Even in the best financial environment for owners, on large projects the list of bidders who are technically or financially capable and qualified to execute the scope of work may be quite small. This diminishes or eliminates the benefits that can otherwise be gained by completing a competitive bidding process. Paired with the fact that turbulent financial conditions have led to many insolvencies in the construction industry,⁷⁵ owners may find it difficult to attract sufficient bidders to a project.

Major contractors are becoming more reluctant to enter hard-bid contract environments, instead focusing on established relationships and procurement processes.⁷⁶ The associated financial risks of fixed price design-build projects have impacted the business models of key contractors who can gain business through other agreement structures that do not invite the same level of risk. In addition to financial risk reputation concerns due to unforeseen circumstances, such as supply chain issues, have further disincentivized large contractors from participating in bidding processes where the risk profile is not adaptive.⁷⁷

The Province of Nova Scotia recently encountered this issue when there was only one bid on the Halifax Infirmary Redevelopment project, which has an estimated capital cost of approximately \$2.8 billion.⁷⁸ Though initially interested, EllisDon pulled out of the bidding process due to the scope of the project and ongoing industry challenges and instead sought to bring a proposal as part of a joint venture, which resulted in only one bid on the project.⁷⁹

The Province of Ontario also experienced the same issue with respect to two large Infrastructure Ontario hospital projects. In this case, EllisDon emerged from the request for quote process for the Trillium Health Partners Queensway Health Centre project as the sole bidder. Another Trillium hospital redevelopment and construction project similarly received only one proposal, submitted jointly by EllisDon and PCL Health Care Partners.⁸⁰

⁷⁵ David Outerbridge, Sylvie Rodrigue & David Wawro, "Changes to Litigation Risk in a New Economic Environment" (May 7, 2020), online: *Mondaq* https://www.mondaq.com/canada/trials-appeals-compensation/942644/changes-to-litigation-risk-in-a-new-economic-environment>.

⁷⁷ Olijnyk.

⁷⁸ Kimberly Gale, "N.S. union calls potential end of Halifax Infirmary negotiations 'devastating'" (December 12, 2022), online: *CBC* https://www.cbc.ca/news/canada/nova-scotia/nsgeu-potential-end-of-halifax-infirmary-negotiations-1.6683285>.

⁷⁹ Michael Gorman, "Halifax Infirmary redevelopment down to single bidder, but Premier says he's unfazed" (June 30, 2022), online: *CBC* https://www.cbc.ca/news/canada/nova-scotia/premier-tim-houston-halifax-infirmary-redevelopment-1.6507498>.

⁸⁰ Don Wall, "IO's Lindsay defends two single-bid hospital projects" (October 14, 2022), online: *Daily Commercial News* https://canada.constructconnect.com/dcn/news/projects/2022/10/ios-lindsay-defends-two-single-bid-hospital-projects [*Wall*].

Infrastructure Ontario's CEO, Michael Lindsay, said these procurements are taking place amidst a "once-in-a-generation" set of market challenges that contributed to volatile construction costs and market changes.⁸¹

5. A Busy Energy Industry in Alberta

Despite some financial uncertainty in Canada and internationally, Alberta's oil and gas, renewable energy, and cleantech companies continue to strengthen the province's busy energy industry. Currently under construction are major projects including Suncor's \$1.4B Power Cogeneration Units project in Wood Buffalo⁸² and Air Products' \$1.6B Hydrogen Production and Liquefaction Facility in Edmonton.⁸³ Upcoming projects include the proposed 2023-2025 development of the Future Energy Park Renewable Natural Gas and Ethanol Project in Calgary, which will be North America's largest carbon negative renewable natural gas and ethanol project.⁸⁴ Syncrude Canada has proposed a \$3.3B Mildred Lake Extension project to sustain Syncrude's current production levels, which is expected to be operational by the mid-2020s.⁸⁵ Together with several key actors, Pathways Alliance has proposed the first stage of the development of \$16.5B Carbon Capture Storage Hub in Northern Alberta between 2025-2030.⁸⁶

A busy energy sector will contribute to a contractor favourable environment by bolstering business activity and creating jobs, revenue, and opportunity. While major energy projects have the potential to create spin-off benefits, including supporting job creation and economic development,⁸⁷ they may also shift the bargaining power to contractors. A single mega-project can reduce the contractor resources otherwise available in a market like Canada.⁸⁸ With a number of these projects potentially on the horizon, there could be a serious shortage of viable contractors for owners looking to get projects underway.

energy-industry-means-jobs-revenue-and-opportunity/>.

⁸¹ Wall.

⁸² Suncor, "Suncor invests \$1.4 billion in low-carbon power generation" (November 17, 2019), online: *Suncor* <<u>https://www.suncor.com/en-ca/news-and-stories/our-stories/cogeneration></u>.

⁸³ Air Products, "Air Products to build first commercial-scale hydrogen refuelling station in Edmonton" (May 2, 2023), online: *Canadian Biomass* https://www.canadianbiomassmagazine.ca/air-products-to-build-first-commercial-scale-hydrogen-refuelling-station-in-

edmonton/#:~:text=It%20will%20be%20located%20in,for%20permanent%20sequestration%20safely%20undergrou nd.>.

⁸⁴ Josh Aldrich, "\$1.2-billion bioethanol plant now fully funded, ready for construction" (February 21, 2023), online: *Calgary Herald* https://calgaryherald.com/business/energy/future-energy-park-calgary-fully-funded>.

⁸⁵ Amanda Stephenson, "Oilsands group pledges to spend \$16.5B on carbon capture project by 2030" (October 14, 2022), online: *Global News* https://globalnews.ca/news/9199357/pathways-alliance-oilsands-carbon-capture-2030/>.

⁸⁶ Government of Alberta, "Alberta Major Projects", online: *Alberta.ca*

<https://majorprojects.alberta.ca/#/?sector=Power&type=Power_Bioenergy,Power_Natural-

Gas, Power_Other, Power_Solar, Power_Transmission-Line, Power_Wind&includeNoEstimates=1>.

⁸⁷ Tom Olsen, "Commentary: A healthy Canadian energy industry means jobs, revenue and opportunity" (August 6, 2020), online: *Canadian Energy Centre* https://www.canadianenergycentre.ca/commentary-a-healthy-canadian-

⁸⁸ Olijnyk.

6. ESG on the Rise

Across industries, there is a growing demand to address climate change and other environmental, social, and governance ("ESG") concerns in contract clauses. Many companies, lenders, and shareholders have ESG policies and expectations. For example, Salesforce has instituted a set of sustainability-related terms to include in its supplier contracts that aim to reduce carbon emissions.⁸⁹ Further, ESG reporting will soon be required of certain federally regulated institutions by law.⁹⁰ As ESG reporting obligations and practices evolve, construction industry participants must be able to adapt to different demands and showcase the efforts being made.

ESG targets and reporting require tracking and effort at all levels of a project. These requirements may even extend to subcontractor and supplier performance. As a result, ongoing communication and evolving practices will be required as the law shifts, which are difficult to address in fixed price traditional contracting scenarios.⁹¹ By contrast, collaborative contracting promotes a dynamic where ESG principles can be considered at the outset of the contractual relationship and continue to be a priority throughout the project. Items like meaningfully enriching local communities, positive stakeholder engagement, or enhancing diversity and inclusion in participant organizations can all be expressly set out in collaborative contract models.

V. TYPES OF COLLABORATIVE CONTRACTS

The umbrella of "collaborative contracts" captures a variety of approaches to managing a contractual relationship, each of which is fundamentally established through the specific terms and conditions in the contract. Many of these models borrow from one another and it is not realistic to expect that a given moniker will necessarily define every element a particular arrangement. The following section of this paper, however, will identify and define some key categories.

Importantly, engaging a collaborative contracting model does not stop once the parties negotiate the terms and sign on the dotted line. Collaborative contracts require a shift in mentality and a continued and ongoing investment in promoting the project objectives over individual goals, which will ideally also benefit the project participants individually. A collaborative contract aims to reward divergent commercial interests by setting the achievement of collective project benchmarks as a profit driver. The overall objective is to get everyone pulling in the same direction.

Collaborative contracts are usually most suitable for large projects where the pool of participants who are financially capable of performing the work is small.⁹² Collaborative contracts are also effective as a means of implementing a project with shorter procurement timelines where the owner needs boots on the ground before the design or its requirements are complete.⁹³ Collaborative

⁸⁹ Salesforce, "Salesforce Urges Suppliers to Reduce Carbon Emissions, Adds Climate to Contracts" (April 29, 2021), online: *Salesforce News & Insights* https://www.salesforce.com/news/stories/salesforce-urges-suppliers-to-reduce-carbon-emissions-adds-climate-to-contracts/.

⁹⁰ Conor Chell and Laura Roberts, "It's Official: Mandatory ESG Disclosure Is Coming to Canada" (April 8, 2022), online: *MLT Aikins* https://www.mltaikins.com/esg/its-official-mandatory-esg-disclosure-is-coming-to-canada/. ⁹¹ Ebel et al.

⁹² Brendan Young, Ali Hosseini & Ola Laedre, "The Characteristics of Australian Infrastructure Alliance Projects" (2016) Energy Procedia 96 (2016) 833-844, at 836.

⁹³ Julie Whitehead, "Early Contractor Involvement – the Australia Experience" (2009) 4:1 Construction L Intl at 26.

contracts can also diminish or eliminate the inherently adversarial nature of traditional contracting. They can unlock significant productivity and enable the delivery of assets at a lower cost.⁹⁴

The main purpose of collaboration is to ensure that there is a commercial framework and risk allocation that works for the parties and ensures there is a viable project. By working together to better understand the owner's requirements and project characteristics, all parties can ensure the output is possible and in line with expectations.

Collaboration can be achieved by structuring the relationship between the project participants with a focus on specific elements. Authors have categorized these in a variety of ways, but generally the following organizing principles are instructive:

- Alignment. Success in a collaborative contract requires that the parties align their interests and have sufficient experience with the model to realize a marked change in behaviour.⁹⁵
- **Framing the Relationship**. Through the creation of a contract, including decision-making frameworks and conflict resolution processes as integral components, parties can frame and outline how to resolve issues before they escalate to the point of disputes.⁹⁶
- **Integrated Team**. Traditional contract delivery models can create silos that result in barriers between teams and make collaboration difficult. Integrated project teams across disciplines and scopes of work enable parties to work together to prioritize solutions and focus on outcomes rather than shifting blame.⁹⁷
- **Reasonable Allocations of Risk**. Parties should be careful to establish a fair pricing model and risk allocation, all of which should be transparent. This is a fundamental part of creating trust among the parties and shifting the mentality away from prioritizing individual gain over project success.⁹⁸
- **Dismantle Unrealistic Expectations**. Part of assigning realistic allocations of risk includes dismantling unrealistic expectations around price. Allowing exaggerated expectations with respect to, among other things, return on investment, profit, overhead, responsibility, and cost, create an expectations gap. While dismantling these expectations may result in a slower start and a greater investment at the outset, leaving these expectations in place contributes to inefficient pricing and risk allocation, resulting in a potentially unsuccessful dynamic that is more prone to disputes. As always, risk should be allocated to the party best able to manage it.⁹⁹

To varying degrees, collaborative contracts organize the relationship between the parties with the objective of balancing the above elements. Where that is achieved, it creates space for unique and

⁹⁴ Howard W Ashcraft, "Negotiating an Integrated Project Delivery Agreement" (2011) 31 Construction L 17 [Ashcraft] at 19.

⁹⁵ Douglas R Stollery, QC, "Strategic Alliances in the Construction Industry" (2000) 3 Construction L Reports Arts 260.

⁹⁶ Saxton.

⁹⁷ Saxton.

⁹⁸ Saxton.

⁹⁹ Saxton.

unconventional outcomes such as innovative and new project execution methods, productivity improvements, and environmentally and socially conscious project execution.

1. Early Contractor Involvement ("ECI")

Everything old is new again.

The Canadian Construction Association ("CCA") introduced a "Guide to Construction Management" in 1979 with sample contract terms for engaging a construction manager.¹⁰⁰ In 2010, the Canadian Construction Documents Committee ("CCDC") published two template forms embodying an early contractor involvement model, being the CCDC5A and CCDC5B.¹⁰¹ Further, the NEC Engineering and Construction Contract suite of contracts, created by the UK Institution of Civil Engineers, has included an ECI option since 2015.¹⁰² In 2017, the University of Auckland published a report on ECI setting out that it had been actively used in New Zealand since at least the early 2000s.¹⁰³

The ECI model can be integrated effectively into the traditional construction management model described above, wherein the owner contracts separately with a consultant to design the project and then engages a construction manager for construction activities. ECI differs from the traditional approach, primarily in that the construction manager is engaged early in the design process before it is complete, which allows the construction manager an opportunity to provide invaluable cost, schedule, and constructability input to the design.¹⁰⁴ A construction manager may also be asked in the early stages to provide insight into various facets of the work, including phasing, material selection, and to provide real time cost information from its supply chain.

ECI provides an opportunity for the owner to obtain reasonably reliable pricing and schedule information as the design is being developed and to reduce the likelihood of surprise at how much the construction will cost or how long it will take. Further, in an ECI scenario, where the estimated price is outside the owner's budget, a contractor may also be asked to undertake value engineering

¹⁰⁰ Ontario Association of Architects, "Practice Tip – PT.23.2: CCDC Construction Management Contracts" (May 21, 2012), online: *Ontario Association of Architects*

https://www.oaa.on.ca/Assets/Common/Shared_Documents/Practice%20Tips/PT.23.2_V01.1_CCDC_CM-Constracts_20120521.pdf>

¹⁰¹ CCDC 5A and CCDC 5B (2010).

¹⁰² NEC, "New 'early contractor involvement' clauses for ECC" (November 27, 2015), online: NEC

< https://www.neccontract.com/news/new-% E2% 80% 98 early-contractor-involvement% E2% 80% 99 - clauses-for-ecc>.

¹⁰³ Margaret Cobeldick, "Investigation into the performance of Early Contractor Involvement (ECI) on New Zealand infrastructure construction projects" (2017), online: *The University of Auckland*

https://researchspace.auckland.ac.nz/handle/2292/36299>.

¹⁰⁴ Thomas Laursen & Bernard Myers, "Public Investment Management in the New EU Member States:

Strengthening Planning and Implementation of Transport Infrastructure Investments" (February 2009), online:

World Bank <http://documents.worldbank.org/curated/en/534761468247847349/Public-investment-management-in-the-new-EU-member-states-strengthening-planning-and-implementation-of-transport-infrastructure-investments> at 25.

studies¹⁰⁵ and suggest opportunities to reduce cost without unnecessarily sacrificing functionality or performance.

The ECI contractor procures trades on a transparent and open book basis once the design has been finalized and, assuming price certainty can be agreed to between the parties, the owner and ECI contractor may agree to adopt terms setting out a fixed price or guaranteed maximum price to complete the project under a more traditional risk allocation model. The owner engages the ECI contractor early on with the hope that the parties can, through working together, come to an agreement on what the total cost and time to construct the project will be.

2. Progressive Design Build ("PDB")

The PDB model for project delivery has gained popularity in recent years,¹⁰⁶ being adopted for example in complex, risky transit projects.¹⁰⁷ In a PDB contract, the owner selects a design-builder, prior to finalizing the functional program¹⁰⁸ and budget. This provides a single point of accountability for the owner, similar to a traditional design-build model, and also provides an opportunity to have a well-rounded design-builder early in the conception of the project. Because the functional program remains subject to revision and refinement at the time of tendering the design-builder, the procurement strategy is largely based on qualifications and not cost. The owner and design-builder are positioned to cooperate from the outset and work together to define the project requirements, design, pricing, and risk. Throughout the early phases of the work, the owner and design-builder can prepare multiple models, target prices, a variety of designs, scopes, and options to cooperatively land on a realistic schedule and cost for the work.

Unlike a traditional design-build contract, a PDB contract can be reflected in one or two separate documents and is usually structured in phases with "off-ramps" at designated decision gates, should the owner reject the design-builder's price or other commercial terms.

Phase 1 includes design and budgeting. This phase is to be performed on an open-book basis, such that there are no surprises or hidden details informing the cost and schedule for construction. There is also usually the option to engage the design-builder in limited scopes of actual construction work prior to the commencement of the project in earnest, by way of enabling works or early works agreements. Initiating too much work by way of early works agreements, however, gives the

¹⁰⁵ Samuel Laryea & Ron Watermeyer, "Early contractor involvement in framework contracts" (2016) 169:1 Management Procurement and L 4 at 14.

¹⁰⁶ See, for example: Graham Construction, "Graham Awarded Progressive Design-Build Contract for New Fort St. James Hospital" (April 20, 2022), online: *Construction Links Network* (Graham Construction entered into a PDB contract with Infrastructure BC in relation to the redevelopment of the Stuart Lake Hospital in Fort St. James, British Columbia. This Design-Build Agreement with Graham was Infrastructure BC's first PDB contract).
¹⁰⁷ Kathy Jiang, "What is Progressive Design Build" (October 18, 2022), online: *Glaholt Bowles*

">https://www.glaholt.com/resources/publications/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publications/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publications/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publications/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publications/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publications/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publications/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publications/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publication/what-is-progressive-design-build>">https://www.glaholt.com/resources/publication/what-is-progressive-design-build

¹⁰⁸ University of British Columbia, "Master Planning and Functional Planning", online: UBC Facilities:

Infrastructure Development <Master planning and functional planning (ubc.ca)> ("A functional program summarizes and analyzes the functional and operational requirements of each department within a planned facility. As such, it provides for a level of detail that is sufficient for an architect to begin designing that particular building or space").

design-builder significant leverage in advance of arriving at the decision-gate to award the phase 2 work and owners must therefore be cautious as to how much of such work they award.

Following completion of the phase 1 design and budgeting work, the parties may agree to proceed with a variety of contracting models for the phase 2 construction. In the event the parties achieve agreement on the terms for proceeding, the parties may, for example, enter into a fixed price or GMP design-build contract.

In PDB, the owner engages a design-builder from the outset, but defers obtaining price, schedule, and performance commitments until after the design has been sufficiently defined through a collaborative and iterative pre-construction design process. The design-builder's engagement in the process from the beginning invites it to take ownership over the success of the project, and their involvement in phase 2 is often where the design-builder would realize most of its profit. This model in essence offers the design-builder the opportunity to influence the overall design, phasing, material selection, and schedule in order to, on an open-book basis, set the project up for success.

3. Alliance

Alliance contracting was conceived and implemented in the early 1990s for high-risk oil and gas projects in the North Sea. The Andrew Drilling Platform project introduced the model in order to create a more collaborative work environment and share project risks more evenly among project teams.¹⁰⁹ An alliance model is marked by many key features that are shared by other collaborative models, and include: (i) risk and opportunity sharing; (ii) commitment to "no disputes"; (iii) best-for-project unanimous decision-making processes; (iv) "no fault – no blame" culture; (v) good faith; (vi) transparency expressed as open book documentation and reporting; and (vii) a joint management structure.¹¹⁰

To initiate and form the project alliance, which effectively operates like a multi-stakeholder project team, the owner may engage multiple respondent entities to submit their qualifications for consideration. There is a greater emphasis on key individuals, the experience of the team, and their willingness to collaborate over price. From there, the owner will shortlist and evaluate respondents and their proposals. This often includes behavioural evaluation based on collaboration and alignment with the owner. For example, in an alliance contract implemented in 1994 for the Wandoo Platform Project, which is located 75km northwest of Dampier, Western Australia, the owner dedicated \$1M to behavioural workshops, training, and collaborative sessions aimed in part at shifting the parties from a confrontational approach for pricing to a collaborative "open book" policy.¹¹¹

¹⁰⁹ Peter Raisbeck, Ramsay Millie & Andrew Maher, "Assessing integrated project delivery: a comparative analysis of IPD and alliance contracting procurement routes" in C Egbu, *Procs 26th Annual ARCOM Conference*, (Leeds, UK, September 6-8, 2010) 2 Association of Researchers in Construction Management 1019-1028 [*Raisbeck*, *Ramsay & Maher*] at 1021.

¹¹⁰Australian Government, "National Alliance Contracting Guidelines: Guide to Alliance Contracting" (September 2015), online: *Australian Government*

https://www.infrastructure.gov.au/sites/default/files/migrated/infrastructure/ngpd/files/National_Guide_to_Alliance e_Contracting.pdf> [Australian Government] at 12.

¹¹¹ Raisbeck, Millie & Maher at 1021.

In an alliance model, once selected, the non-owner participants and owner enter a contract to form an alliance. The alliance agreement includes a joint governance and management structure between the owner and non-owner participants with a requirement for unanimous decision-making, except for decisions reserved by the owner as requiring its ultimate approval. Non-owner participants contract with subcontractors on behalf of the alliance.

The owner pays for the actual cost of the work, but the non-owner participants risk all or a portion of their traditional profit mark-up but not their overhead. It is also possible to institute a pain-share and gain-share model. For example, non-owner participants may split the additional cost if the costs exceed target price until their profit has been consumed and the owner pays for the remainder.

These contracts generally include waivers of the right to sue, litigate, or arbitrate against the other party, with only limited exceptions such as willful default or breach of exceptionally concerning provisions like anti-corruption or intellectual property clauses. The intention behind such waivers is to prevent finger pointing and promote problem solving and reducing or eliminating entirely actions that, in a traditional model, might otherwise be motivated by self-preservation.

4. Integrated Project Delivery ("IPD")

IPD and alliance contracts are similar. The American Institute of Architects defines IPD in aspirational terms as:

[...] a project delivery approach that integrates people, systems, business structures and practices into a process that collaboratively harnesses the talents and insights of all participants to optimize project results, increase value to the owner, reduce waste and maximize efficiency through all phases of design, fabrication and construction.¹¹²

IPD aligns the business interests of all parties through a multi-party contractual arrangement among (a minimum of) the owner, consultant, and contractor.¹¹³ IPD creates a risk and reward pool that is distributed depending on pre-agreed project benchmarks. IPD aims to create an "all for one and one for all" approach to project execution. Studies have shown that IPD contracts achieve statistically significant advantages across several performance metrics over traditional project delivery models.¹¹⁴

An IPD project will generally have five major contract elements: (i) early involvement of key participants; (ii) shared risk and reward based on project outcome; (iii) joint project control;

¹¹⁴ Mounir El Asmar, Awad S Hanna & Wei-Yin Loh, "Quantifying performance for the integrated project delivery system as compared to established delivery systems" (2013) 139:11 *Journal of Construction Engineering and Management*; David C Kent & Burcin Becerik-Gerber, "Understanding Construction Industry Experience and Attitudes toward Integrated Project Delivery" (2010) 136:8 J Construction Engineering and Management at 815-825; Renee Cheng et al, "IPD Case Studies" (2012), online: University of Minnesota Twin Cities <https://conservancy.umn.edu/handle/11299/201408>; Allison Markku & Renee Cheng, "IPD: Performance, Expectations, and Future Use. A Report On Outcomes of a University of Minnesota Survey" (2015), online: University of Minnesota Twin Cities <https://conservancy.umn.edu/handle/11299/201405>.

¹¹² Raisbeck, Millie & Maher at 1019-1020.

¹¹³ Jobidon, at 18.

(iv) reduced liability exposure; and, (v) jointly developed and validated targets.¹¹⁵ This is similar to an alliance model and the most marked difference between the two models has historically been that IPD contracts also integrate Building Information Modelling (BIM) protocols, improved project management techniques to improve workflow and cost management, as well as early stage collocation in a "Big Room" environment.¹¹⁶

Proceeding through an IPD project involves five phases: (a) solicitation; (b) validation; (c) design and procurement; (d) construction; and (e) warranty. Those phases include, in brief, the following:

(a) <u>Solicitation</u>

In this phase owners solicit interested parties. After conducting whatever procurement process is necessary or desirable in the circumstances, the selected parties sign the IPD contract. This process of identifying key parties and selecting the IPD participants may or may not be less involved than the similar initial phase in the alliance process.

(b) <u>Validation</u>

This phase commences upon executing the IPD contract. In this phase a Project Management Team (the "PMT"), consisting of a representative of each party to the IPD contract, is established to provide management level guidance for collaborative planning and design to meet the owner's objectives. Among other things, the PMT conducts site investigations to verify all existing information and requisition other investigations necessary to prepare a properly informed plan for execution of the construction activities. The PMT will also, in the validation phase, create a "validation report".¹¹⁷ A validation report is a detailed document that requires considerable effort from the PMT and provides an opinion as to whether the project is viable (i.e., confirming the business case for the project). The validation report will also, importantly, set out the criteria for the risk and reward pool.¹¹⁸ The owner must ultimately approve the validation report. If the validation report fails to achieve owner approval, then there is an off-ramp and right for the owner to terminate the project. In that event, the other parties receive reimbursable costs without profit and the owner keeps all work product, but with no liability ascribed to other parties.

¹¹⁵ Howard W Ashcraft, Jr, "Integrated Project Delivery Agreement–A Lawyer's Perspective" (2014) J Can C Construction L 105.

¹¹⁶ Bhargav Dave et al, "ViBR – Conceptualising a Virtual Big Room through the Framework of People, Processes and Technology" (2015) 21 Procedia Economics and Finance 586 at 586-593 ("The "Big Room" in construction refers to a large facility supporting the colocation of the entire project team, where some of the critical problems such as delays in decision-making, problems in communication, disparity in design iterations are eliminated, and trust is increased").

¹¹⁷ (The validation report often confirms: (i) the viability of the owner's base program (a statement of the Owner's requirements based on the conceptual design and refined through validation); (ii) base target cost; and (iii) a milestone schedule. Common elements of a validation report include project program and planning summary, staffing plan, design narrative and systems validation, base target cost, milestone schedule, contract tasks matrix, risk pool, project contingency, confirmation of project financing, detailed breakdown of all projected reimbursable costs).

¹¹⁸ Ken Lancastle, "Introduction to CCDC 30 – A Canadian Integrated Project Delivery (IPD) Contract" (February 17, 2021), online: *Lean Construction Blog* https://leanconstructionblog.com/Introduction-to-CCDC30-Canadian-Integrated-Project-Delivery-Contract.html>.

(c) <u>Design and Procurement</u>

Once the validation report has been approved, the design and construction team perform the design services and procurement. The PMT will continue to: (i) oversee the design; (ii) authorize early procurement of long-lead items; (iii) organize and manage Project Implementation Teams (the "PITs"); and (iv) use target value design¹¹⁹ to optimize and coordinate the design as it is being developed. PITs are interdisciplinary, cross-functional teams who develop detailed phasing plans and address more detailed aspects of project delivery.¹²⁰ In this phase the PMT and PITs will: (i) develop a detailed elemental cost model based on base target cost, including a breakdown and profit for each member of the design and construction team; (ii) establish the final target cost, including any added value incentive items for owner selection; and, (iii) update the milestone schedule, contract tasks matrix, and finalize the project contingencies as required.

(d) <u>Construction</u>

After the design and procurement phase, there is typically a commencement document that includes a notice to proceed issued by the PMT. During this construction phase, the PMT oversees: (i) completion of design services; (ii) procurement; (iii) construction; (iv) final testing; and (v) start-up, commissioning, and delivery of close-out materials.

(e) <u>Warranty Phase</u>

In this final phase, the PMT oversees warranty repairs and final deficiency repairs. After a set period of time, there is a finalization of the project accounting and distribution of remaining the remaining risk and reward pool.

IPD is relatively common in the infrastructure development space in Canada. In 2018 the CCDC introduced its own version of an IPD contract, the CCDC 30.

5. Key Features of Collaborative Contracts

The key features of collaborative contracts, to varying degrees, can be grouped as follows: (a) risk and reward sharing; (b) abolishing the blame game; (c) good faith & transparency; and (d) best-for-project decision-making.¹²¹

¹¹⁹ Project Production Systems Laboratory, "About the Project Production Systems Laboratory at UC Berkeley", online: *P2SL UC Berkeley* https://p2sl.berkeley.edu/initiatives-2/target-value-

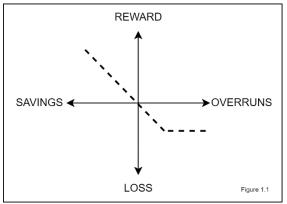
design/#:~:text=Target%20Value%20Design%20(TVD)%2C,of%20designing%20and%20making%20products> (University of California, Berkeley defines target value design as: "Target Value Design (TVD), refers to the application of Target Costing (TC) to the delivery of projects in the Architecture-Engineering-Construction (AEC) industry. This design method radically differs from what has become the traditional way of designing and making products. Rather than treating cost as an outcome of wasteful design-estimate-rework cycles, TVD is a method that makes customer constraints (on cost, time, location, and others) drivers for design in pursuit of value delivery"). ¹²⁰ (For example: site use, selection of materials, systems, equipment, sequencing, etc.).

¹²¹ Jason Roth et al, "Alliance Contracting in Canada: An Upcoming Trend?" (2021) J Can C Construction L Journal 89 [*Roth*]; See also: James Lacey, "Partnering and Alliancing: Back to the Future?" (2007) 26:1 Australian Resources and Energy LJ 69 at 69-82.

(a) <u>Risk and Reward Sharing</u>

A key feature of collaborative contracts is that the risk and opportunities are shared among the owner and the non-owner participants. The common approach of open-book pricing is intended to allow for these risks to be priced by the parties with candour and allow both parties to fully assess who should bear a risk. For example, in PDB contracts the phase 1 work¹²² allows the owner and design-builder to openly review the contingencies applied to certain scopes and risks and gives the owner an opportunity to assume a risk to avoid paying a risk premium and instead invest in a better asset. For example, by agreeing to provide a cash allowance for a specific scope for which the pricing is hard to confirm with certainty. However, these risks are not always shared exactly equally.

For a non-owner participant example, in collaborative contracting may be entitled to obtain a certain portion of the cost savings upon conclusion of the project up to a specified maximum whereafter the owner alone enjoys the benefit. Additionally, some risks are reserved and assigned expressly to a single party.¹²³ In an alliance agreement there may be a cap on the non-owner participants' total pain share and the risk of obtaining certain governmental approvals may be assigned to the owner. As shown in figure 1.1, where the dotted line represents the



non-owner participants' gain or loss, as the price begins to exceed the target price the non-owner participants may be responsible for a portion of the additional costs, resulting in a loss. At a certain point, however, the loss for non-owner participants will plateau and regardless of how much the cost exceeds the target price, the non-owner participants will no longer share in the loss. Once this plateau has been reached the non-owner participants are effectively working for free as their profit has been completely consumed by cost overruns. By contrast, the greater the cost savings the greater the reward payment the non-owner participants may earn.

(b) <u>Abolishing the Blame Game</u>

Perhaps the most significant difference between a traditional project delivery method and a collaborative contract is the prohibition on commencing claims. The bite behind a "no disputes" bark in collaborative contracts can vary. In some forms, like ECI or PDB, the parties may reserve all rights with respect to the claims that you might otherwise see in a traditional contract. However, in collaborative contracts like IPD and alliance, there is a waiver of claims against other contracting parties.

The template alliance agreement prepared by Infrastructure BC, for example, includes the following provisions:

"3.5 To the extent permitted by law, we agree that only an act or omission of a Participant in performing, or failing to perform, the Alliance Works

¹²² (Which phase generally includes design, budget, schedule, phasing, and tendering).

¹²³ Australian Government at 10.

which amounts to a Wilful Default or an Act of Insolvency will give rise to enforceable obligations, entitlements, rights or remedies under this Agreement, including a right to claim or recover any Loss, or otherwise at law or in equity.

3.6 To the extent permitted by law, we release and discharge each other from any Loss, effects, claims, actions or proceedings under this Agreement or otherwise at law or in equity arising from or as a result of any act or omission in performing, or failing to perform, the Alliance Works which does not amount to a Wilful Default or an Act of Insolvency in respect of which we may have otherwise had recourse under this Agreement or otherwise at law or in equity but for this release and discharge."¹²⁴

The drafts of the publicly available Infrastructure Ontario and Metrolinx alliance agreement on the Union Station Enhancement Project included the following provisions:

"6.2 No litigation, arbitration or adjudication

Subject to Section 6.4, the Parties agree that there will be no litigation, arbitration or adjudication between them arising out of or in connection with this Agreement.

6.3 Non-application of enforceable rights or obligation

6.3.1 Subject to the exceptions listed in Section 6.4, a failure by a Party to perform any obligation or to discharge any duty under, or arising out of or in connection with this Agreement, or which is otherwise an obligation to or duty owed to another Party however arising, does not give rise to any enforceable right or obligation at law or in equity and, to the extent that it does, the other Parties releases and hold harmless that Party from any consequences at law or in equity for that failure.

6.3.2 Subject to the exceptions listed in Section 6.4, the sole remedy arising under contract, tort, statute or otherwise for failure by any Party to perform any obligation or to discharge any duty under, or arising out of or in connection with this Agreement, or which is otherwise an obligation to or duty owed by it to another Party however arising is the operation of Schedule 11 (Risk or Reward Regime) and Schedule 12 (Payment Procedures)."¹²⁵

Lastly, the CCDC 30 includes the following provisions:

"11.1.1 The Owner, Consultant, Contractor, and Other IPD Parties waive all claims against each other arising from or related to the Contract, except solely for direct loss and damages arising from the following:

¹²⁴ Infrastructure BC, "Alliance", online: *Infrastructure BC*

<https://www.infrastructurebc.com/publications/competitive-alliance/>.

¹²⁵ Infrastructure Ontario, "Union Station Enhancement Project: Project Alliance Agreement" (2020) online: *Infrastructure Ontario*

<https://www.infrastructureontario.ca/49718d/contentassets/bd8e55a59aef4c9d9480540cefd93038/project20alliance 20agreement.pdf> [*Infrastructure Ontario Agreement*], ss 6.2-6.3.

- 1. claims arising from a party's willful default;
- 2. claims arising from any express warranty obligations of the parties or an obligation to provide third-party warranties under the Contract Documents;
- 3. claims for payment of amounts due under the Contract by any party to the Contract against any other party;
- 4. claims attributable to any violations or alleged violations of any intellectual property right, including infringement or an alleged infringement of a patent or copyright, or violations or alleged violations of any trademark or licences;
- 5. claims for failure to provide insurance coverage specified in the Contract Documents;
- 6. claims for which indemnification under policies of insurance specified in the Contract Documents is available, to the extent such insurance proceeds are available;
- 7. claims by third parties; or
- 8. claims for damages resulting from substantial defects or deficiencies in the Design or the Work which were not known, or reasonably could not have been discovered, prior to the end of the Warranty Phase. "Substantial defects or deficiencies" mean those defects or deficiencies in the Work which affect the Work to such an extent or in such a manner that a significant part or the whole of the Work is unfit for the purpose intended by the Contract Documents."¹²⁶

As per the above, common exclusions to these exculpatory clauses include willful default, bringing claims pursuant to statutory requirement that cannot otherwise be excluded as a matter of law, insurance proceeds, and bankruptcy and insolvency.

In addition to these waivers, and as expressly set out in the Union Station Enhancement Project alliance agreement,¹²⁷ the pain share gain share mechanism results in a type of formula for resolving disputes. Where there are cost savings, the parties share in the project's success and the sole remedy for poor performance is dealt with by the pain share mechanism in the contract. Where the cost of the project exceeds the target price, even if the parties disagree as to the reason why, they have already agreed upon a formula for how those excess costs will be addressed. This motivates cooperation to realize collective goals while eliminating individual gains from siloed compensation structures. A traditional contracting model by contrast typically includes a risk profile where one party alone will be responsible for cost overruns and, unless they agree after the fact how the overrun arose, the parties must revert to litigation or arbitration to determine the matter. Trying to determine after the fact how those costs arose and how they will be assigned is likely to be difficult when one party or the other stands to lose. Resorting to litigation or arbitration to resolve the dispute is expensive and time consuming.

A formula for communally assigning benefits and burdens, regardless of who is directly responsible for the cost savings or cost overruns, fosters a "no blame" culture. This is often

¹²⁶ CCDC, "CCDC 30 – 2018 Integrated Project Delivery Contract" [CCDC 30].

¹²⁷ Infrastructure Ontario Agreement, s 5.5.2.

reinforced by direct words in the agreement. The Infrastructure BC template agreement sets out expressly:

"1.2.3 we all win, or we all lose, based on project outcomes. Win-lose outcomes are not acceptable; [...]

1.2.6 we will have clear accountabilities within a no blame culture; [...]

2.1.4 take collective responsibility for managing all of the risks in performing the Alliance Works; [...]

2.1.10 create positive peer relationships in an environment of mutual support, appreciation and encouragement;" 128

Similarly, the Metrolinx agreement states that the participants agree with and commit to "a 'no blame' and 'no claim' culture between the Participants in relation to disputes, errors, mistakes, Defects, poor performance and other issues which may arise within the Alliance."¹²⁹ The CCDC 30, likewise, assigns the PMT the responsibility of "actively promot[ing] harmony, collaboration, and cooperation among all entities performing on the Project".¹³⁰

Though this may seem like pie in the sky aspirations, when the express language is taken in combination with the waiver of claims and the formula for addressing unexpected monetary challenges, collaborative contracts create a framework that can meaningfully shift behaviour.

(c) <u>Good Faith & Transparency</u>

While good faith is an underlying duty in all contracts in Canada,¹³¹ this duty is intentionally heightened in collaborative contracts.¹³² Alliance contracts, for example, include overt commitments to putting the project's interests first and express the intention to perform all obligations in good faith. Moreover, in most collaborative contracts the non-owner participants must commit to an open-book approach to all work including estimating and budgeting. This means there are usually expanded audit and accounting rights and equal access to information for all participants. It also means there are no hidden fees and all costs and benefits, risk, and opportunities are out in the open for all to investigate. This is, however, not intended to create a contractual panopticon, though it may very well do that, but is instead intended to give all parties the ability to work cooperatively in finding improvements to all processes being undertaken to the benefit of all.

(d) <u>Best-For-Project Decision-Making Processes</u>

Alliance and IPD contracts include mechanisms for unanimous decisions among the project participants, which are aimed at achieving a positive outcome for the project and not just the

Agreement-Generic-Clean.pdf>.

¹²⁸ Infrastructure BC, "Draft Project Alliance Agreement – Template" (2021), online: *Infrastructure BC* https://www.infrastructurebc.com/wp2/wp-content/uploads/2021/12/2021-11-09-Draft-Project-Alliance-

¹²⁹ Infrastructure Ontario Agreement, s 5.5.1.

¹³⁰ CCDC 30, s 2.1.1.3.

¹³¹ Bhasin.

¹³² Jones at para. 2.1.

individual. By contrast, ECI and PDB contracts are oriented towards disclosure and sharing of contractor concerns and potentially modified design to ensure the owner's expectations are met during construction. Either way, best-for-project decision-making can be done by way of early discussions in project design prior to execution or by way of a detailed and specific decision-making infrastructure.

For example, under an IPD model the PMT and PITs work jointly in the management of the project. Alliance contracts typically require a joint management structure, and in a similar fashion to the "no blame" culture, include specific language that requires participants to agree to a model of unanimous "best for project" decision making. The alliance agreement will provide detailed information regarding what process must be followed when rendering decisions and should include a responsibility matrix¹³³ for which levels of the management structure are responsible for which decisions. Typical owner reserved decisions include changes to the design, adjustments to the scope of work, suspending the work, termination for convenience, and external communications.

In both alliance and IPD, the "best for project" standard in decision making is often established through several schedules and instruments. The Metrolinx alliance agreement, for example, builds out this standard by including: (i) a "VFM" or value for money statement; (ii) an Alliance Charter (including the Alliance Principles, Alliance Goals, and Alliance Values); and (iii) defines "Best For Project" as, "an approach, determination, decision, method, solution, interpretation, outcome or resolution that is consistent with the VFM Statement and the Alliance Charter."¹³⁴

Value for money is not a term unique to collaborative contracts. The concept is applied in all forms of contracting. The Australian Department of Infrastructure, Transport, Regional Development, Communications, and the Arts ("Infrastructure Australia") provides a helpful definition for value for money as follows:

Value-for-Money denotes, broadly, a net measure where the required benefits (including quality levels, performance standards, and other policy objectives such as social and environmental impacts) are balanced and judged against the cost (price and risk exposure) of achieving those benefits.

Generally, Value-for-Money is assessed on a 'whole-of-life' or 'total-costof-ownership' basis. This includes the various phases of contract period, including transitioning-in and transitioning-out.¹³⁵

While important to consider in all contracts, in an alliance contract there is a specific value for money statement prepared by the owner that is intended to serve as an overriding guiding principle in all project activities. Further, an alliance contract includes an "alliance charter". As set out by the Infrastructure Australia in its National Alliance Contracting Guidelines, an alliance charter is intended to be a charter of behaviours to which participants must commit and that is formalized in the alliance agreement. A formal charter of behaviours should, however, move away from broad

¹³³ Infrastructure Ontario Agreement, schedule 6.

¹³⁴ Infrastructure Ontario Agreement, schedule 1.

¹³⁵ Australian Government at 14.

"motherhood" behavioural statements and other platitudes towards more objective and understandable behavioural criteria.¹³⁶

VI. PROJECTS WELL SUITED FOR COLLABORATIVE CONTRACTS

Collaborative contracts are well-suited to projects where there is a sufficient budget and parties involved to warrant the increased upfront investment. Additionally, collaborative contracts are suitable for the following:

- Large Projects. ECI and PDB are easily implemented on low budget projects, but IPD or alliance project delivery methods are likely best suited to large-scale projects. Particularly where the number of potential parties who could reasonably be expected to undertake the project are limited, collaborative contracts will offer better opportunities to realize good value for money when compared to traditional lowest-bid-wins procurement.
- **Early Stages**. Setting up the project correctly from the outset is imperative. Shifting into a collaborative contracting method midstream is ill-advised. It is important to start from the beginning.
- **Complex**. It is not normally necessary to adopt a full collaborative contract for simple projects. Certainly, collaborative themes are suitable for all types of contracts, but generally an alliance or IPD contract requires a complex project to fully benefit from the detailed management structure.¹³⁷ One of the ways collaborative contracts shine is that they bring multiple disciplines together (e.g., designer, contractor, and major suppliers) to ensure all angles are considered. Simple projects do not always require this level of integration.
- **Owner Driven Projects**. Where the owner is taking an active role in providing information to the parties designing or constructing the asset (for example where there may be a highly challenging worksite for which the owner has detailed geotechnical data) collaborative contracts allow the owner an opportunity to remain engaged with the project participants to impact how that information is interpreted and used during execution.
- **Project With International Participants**. Where there are significant geographical barriers between the key portions of the project execution team, the "Big Room" approach of collaborative contracts can assist in keeping the parties aligned.¹³⁸
- **Interested stakeholders**. Collaborative contracts require a mental shift away from traditional adversarial contracting methods. Accordingly, the parties should be willing to invest themselves in a new process.¹³⁹
- Extremely Risky/Uncertain Projects. Where a project is so difficult or risky that it may pose significant risks, and as a result significant pricing allocated to such risk, collaborative

¹³⁶ Australian Government at 34.

¹³⁷ Jones at para 2.1.

 ¹³⁸ Peter Rosher, "Partnering and Alliancing – A New Way of Thinking about Construction", (2015) 3 Int Bus LJ
 237.

¹³⁹ Banaszak et al, at 5.

alternatives may offer a way to allow the parties to share the risk, proceed with the project and avoid huge pricing contingencies.

Energy projects are characterized by many of the above features and may be well-suited to these types of contracts.

In particular, large-scale, complex, first-of-its kind technology development projects are common in the energy sector. For example, in Canada the energy sector is currently developing and implementing hydrogen,¹⁴⁰ carbon capture and underground storage,¹⁴¹ tailings innovation projects,¹⁴² and the deployment of small modular reactor (SMR) technology.¹⁴³ These projects often require the involvement of one or more owner(s), public utilities, several EPC companies, large scale general and civil construction contractors, multiple specialized consultants, construction managers, and technology licensors, all with key roles and different incentives. Where so many different entities play a key role in project success, a multi-party collaborative contract may shine.

Further, these complex technology focused projects are inherently uncertain and risky and, if successful, promise meaningful rewards for not only those involved but potentially also the Canadian populace at large. Iterative engineering and design approaches are also not entirely unknown to the energy industry. Active owner participation and integration with multiple contractors at various stages of project design and execution occurs where, for example, the owner proceeds with a design basis memorandum (DBM) or FEED. The challenge of dealing with brownfield sites and existing operating assets also pose challenges inherent to energy asset development.

Measuring intangible benefits, encouraging innovation for the sake a better project outcome, and taking proactive steps around managing risk, are all inherent to collaborative contracting. Given this context, many of the current and planned projects may benefit if delivered using a collaborative approach. In a review published by McKinsey & Company in January 2020, they reported that oil field projects implementing collaborative contracts saw a 32.5% improvement in cost performance over conventional contracting methods.¹⁴⁴ Similarly, offshore oil projects enjoyed approximately 18%-20% improvement in both cost and schedule performance over conventional contracting methods.¹⁴⁵ As the appetite for traditional risk profiles shifts, and the complexity of energy projects

¹⁴⁰ Government of Alberta, "Air Products Hydrogen Production and Liquefaction Facility", online: Government of Alberta < https://majorprojects.alberta.ca/details/Air-Products-Hydrogen-Production-and-Liquefaction-Facility/4461>.

¹⁴¹ Government of Alberta Major Projects, "Pathways Alliance Carbon Capture Storage Hub (Phase 1)" online: *Government of Alberta* https://majorprojects.alberta.ca/details/Pathways-Alliance-Carbon-Capture-Storage-Hub-Phase-1/10695; *see also* Pathways Alliance, "Carbon Capture and Storage" online *Pathways Alliance* https://pathwaysalliance.ca/cleartheair/carbon-capture/.

¹⁴² Marilyn Scales, "Teck, UBC launch \$4 million professorship to speed tailings research and education" (March 9, 2023), online: *Canadian Mining Journal* .

¹⁴³ Alberta Innovates, "Canada's Small Modular Nuclear Reactor: SMR Action Plan" (January 10, 2023), online: *Government of Alberta* https://smractionplan.ca/content/alberta>.

¹⁴⁴ Jim Banaszak et al, "Collaborative contracting: Moving from pilot to scale-up" (January 17, 2020), online: *McKinsey & Company* https://www.mckinsey.com/capabilities/operations/our-insights/collaborative-contracting-moving-from-pilot-to-scale-up [*Banaszak et al*].

¹⁴⁵ Banaszak et al.

in Canada continues to increase, the motivation to adopting key features of collaborative contracts may increase.

VII. SUCCESS STORIES

There is real world evidence to suggest that collaborative contracts can work.¹⁴⁶ Critics suggest that the success of collaborative contracts, in that they set target costs and schedule based on mutual agreement as opposed to competitively tendered lowest price wins bidding, are in some ways a self-fulfilling prophecy. That perspective, however, fails to account for the extrinsic factors that exist with traditional delivery methods such as the cost of litigation or arbitration that may follow. Or, as another example, the costs associated with contractor default, abandonment, and termination resulting from improperly assumed risks. Either way, there are real world success stories worth noting when considering the effectiveness of collaborative contracts.

The Andrew Drilling Platform Project has been heralded as a "major breakthrough in construction and engineering procurement."¹⁴⁷ In that case, and in 1993 values, the following occurred:

- the cost of the project using traditional procurement practices had been estimated at £450 million;
- through the use of an alliance model, with a gain share regime, the target delivery cost was established at £373 million; and
- the final actual construction cost was £290 million, which resulted in a £45 million dollar distribution of the cost underrun among the seven alliance partners.¹⁴⁸

Moreover, the project was delivered ahead of schedule through innovative construction strategies involving constructing more of the platform onshore than originally thought to be possible. Productivity was well above industry standards and there were no disputes coming out of the project, despite several unexpected and challenging issues arising. Within months of the project starting construction the failure of a major subcontractor resulted in a £7 million dollar loss to the project.¹⁴⁹ The list of innovations and savings realized on the project by encouraging early collaboration among key stakeholders included, among other things, improved safety and reduced accidents, fewer design drawings required, redesign to select less onerous construction requirements, harmony between early design and equipment selection, improved flexibility in material selection and corresponding cost savings.¹⁵⁰ Suffice to say the model demonstrated real world potential in these very early iterations.

¹⁴⁶ Marcus Jefferies, Graham John Brewer & Thayaparan Gajendran, "Using a case study approach to identify critical success factors for alliance contracting" (2014) 51:5 Engineering Construction and Architectural Management 465; *Banaszak et al* (A 2020 survey reported a "15 to 20 percent improvement in cost and schedule performance compared with traditional contracts").

¹⁴⁷ James Barlow, "Innovation and learning in complex offshore construction projects" (2000) 29:7-8 Research Policy 973 [*Barlow*] at 982.

¹⁴⁸ *Barlow* at 982.

¹⁴⁹ *Barlow* at 982.

¹⁵⁰ *Barlow* at 982-983.

A 2008 report on public sector alliances in Australia (and New Zealand) by the Alliancing Association of Australasia (AAA) surveyed the performance of 30 completed alliance projects in Australia. The survey results indicated that 80% of the 30 projects performed on or better than target with regard to time and cost and only 2 projects performed worse than target in both cost and time.¹⁵¹

New Zealand, Australia, the Netherlands, the United States and the United Kingdom have all seen relative levels of success with different collaborative contracting projects. In New Zealand, the development of the Northern Gateway Toll Road, the first toll road in New Zealand to be fully electronic, was awarded to the Northern Gateway Alliance, with an initial value of NZ \$360 million and a contract cost of NZ \$260 million. The contract price followed a typical pricing structure for alliance contracts, with three limbs:

Limb 1 – Direct Costs: Covering labour and materials paid on a monthly basis;

Limb 2 – Office Overhead and Profits: This was calculated by auditing contractors for the previous five years of business to determine an average margin, the margin was then applied to Limb 1 and paid on a monthly basis; and

Limb 3 – Pain/Gain Sharing: Based on savings or cost overruns. The savings were split on a 50% basis as an uncapped profit share between the agency and the alliance partners. The cost overruns have the same split but were capped to the Limb 2 level, ensuring the contractors did not lose money.

The project was completed ahead of schedule and with an actual project cost of NZ \$300 million, which was in line with the terms of contract.¹⁵²

In the Netherlands, the Autobaan A2 Hooggelen project was completed by way of an "alliance-type" arrangement and was a pilot project for collaborative contracting in the country. The project ultimately concluded within the allotted time and on-budget, finishing the entire project within three years.¹⁵³

In Australia, an alliance model was formed during the tender process when five organizations were selected for the project and asked to develop an alliance and collaborative working model for the construction of the Ispwich Motorway Upgrade between Dinmore and Goodna. The project was completed six months ahead of schedule and 10% below budget.¹⁵⁴

¹⁵¹ Jim Ross, "Alliance Contracting: lessons from the Australian experience" (2009) Alliance Contracting Electronic LJ, online: *Alliance Contracting Electronic LJ* http://alliancecontractingelectronic

 $content/uploads/2017/05/Ross-J.18-2009-\% E2\%\,80\%\,98 Alliance-Contracting-Lessons-Learned-from-the-Australian-Experience\%\,E2\%\,80\%\,99.pdf >.$

¹⁵² Douglas D Gransberg, Eric Scheepbouwer & Michael C Loulakis, "Alliance Contracting Evolving Alternative Project Delivery" (2015), online: *National Academies* https://nap.nationalacademies.org/catalog/22202/alliance-contracting-evolving-alternative-project-delivery [Gransberg, Scheepbouwer & Loulakis] at 16-19.

¹⁵³ Gransberg, Scheepbouwer & Loulakis at 24-25.

¹⁵⁴ Gransberg, Scheepbouwer & Loulakis at 26-27.

VIII. COLLABORATIVE CONTRACTS DON'T ALWAYS WORK AS INTENDED

For every good intention, there is an unexpected consequence. While collaborative contracts are intended to produce good outcomes, that does not always preclude disputes, delays, cost overruns, and acrimony. Additionally, there are inherent imperfections in these forms of contract that pose material risks and challenges to project participants whishing to implement them.

1. Agreement to Agree

Due to the lack of detailed specifications, requirements, and project details, when parties first enter into a collaborative contract there is usually little to no price certainty. However, each variation of a collaborative contract has the parties working together to arrive at an agreed upon price for the project after more certain project details are developed. Whether it is switching to a more traditional fixed price, cost-plus with a GMP model, agreeing to a target price in the project or sharing in a risk pool, all collaborative contracts intend that the parties agree at a later date to some form of price certainty.

Under Canadian law, an agreement to agree is not enforceable.¹⁵⁵ A contract is incomplete when the parties have not agreed to essential provisions intended to govern the relationship; the contract is too general or uncertain to be valid in itself and is dependent on the making of a formal contract; or the understanding or intention of the parties is to reach an agreement at a later date. In other words, a "contract to make a contract" is not a contract at all.¹⁵⁶

Subject to complying with their obligations to negotiate in good faith, if the parties are not able to agree to the fixed price, guaranteed maximum price, target for the remainder of the project delivery, or a risk pool there is little recourse available to "force" the parties to agree to such price certainty.

If the parties are unable to provide price certainty or at least a commitment to a "target price", then owners may be forced back to the market to determine if a third party is willing provide the desired price certainty. On January 18, 2023, Infrastructure BC issued a second request for proposals on the Dawson Creek and District Hospital Replacement Project after achieving approximately 60% design completion, due to being unable to arrive at an agreement for the execution of the work with the initially selected proponent.¹⁵⁷ Going back out to the market could be time consuming, politically sensitive (internally and externally for public bodies), costly, and still not provide acceptable pricing certainty.

Well drafted collaborative contracts attempt to mitigate this risk by building into the contract a very detailed process for how price certainty will be achieved. Pre-agreed mark ups for profit and overhead, open book pricing, agreement of what the project budget is at the beginning of the

¹⁵⁵ Bawitko Investments Ltd v Kernels Popcorn Ltd, [1991] OJ No 495, 79 DLR (4th) 97 (ONCA) [Bawitko]. ¹⁵⁶ Bawitko.

¹⁵⁷ ConstructConnect, "B.C. to issue new RFP for Dawson Creek Hospital" (January 4, 2023), online: *Journal of Commerce by ConstructConnect* https://canada.constructconnect.com/joc/news/infrastructure/2023/01/b-c-to-issue-new-rfp-for-dawson-creek-

hospital#:~:text=PROVINCE%200F%20B.C.%20%E2%80%94%20Clark%20Builders,issuance%20of%20a%20ne w%20RFP>; James Paracy, "Dawson Creek, B.C.'s new hospital replacement is one step closer" (January 3, 2023), online: *Vancouver CityNews* .

project, general condition price certainty, and the process by which the price will be ascertained can all be detailed within the contract. While it does not guarantee that both parties will be happy with a price, it can create a contractually enforceable process for how the parties should arrive at a price. Parties often also pre-agree to what contractual amendments will be made once they obtain price certainty so that the parties do not require a lengthy and adversarial negotiation of the contractual terms for the remainder of the project.

2. Attitude Change

Simply signing a collaborative contract is not enough. Collaborative contracts require the parties to change their traditional "finger pointing" approach to project delivery and requires that all parties work together as part of a team to make sure the project succeeds. Collaborative contracts will have some form of shared governance or requirement to meet collaboratively.

The waivers of liability between the parties are an attempt to encourage the parties to attend those meetings and share information freely without the fear of recourse from the other parties on the project. However, the attendance at these meetings can be time consuming and costly. Collaborative contracts are significantly different from traditional contracts and often require training or coaching for key stakeholders to ensure everyone understands what their new obligations are. This attendance is not free. Participants usually see the value that comes with collaboration but may not be willing to invest in it.

Unfortunately, this attitude shift and the burden of administering these types of contracts leads parties to sign a collaborative contract but revert to their traditional roles. In those instances, without the required attitudinal and institutional change, the time spent negotiating and training the parties on a collaborative approach may go to waste.¹⁵⁸ This may result in a reversion to adversarial tendencies between the parties.

Without parties' complete commitment to fostering a teamwork-oriented atmosphere onsite, there is a significant risk that projects are delayed, budgets are exceeded, and disputes arise.

3. Procurement Rules Around Collaborative Contracts

The rules governing public procurement in Canada stem from a number of legal sources, including trade agreements, legislation, and the common law. In Canada, the common law on public procurement has been established over the past number of decades through a series of foundational decisions.¹⁵⁹ Trade agreements like the New West Partnership Trade Agreement ("NWPTA"),¹⁶⁰ the Canadian Free Trade Agreement,¹⁶¹ and the Canada-European Union Comprehensive Economic and Trade Agreement,¹⁶² where applicable, also set out mandatory requirements for

¹⁵⁸ *Ashcraft*, at 17.

¹⁵⁹ (For example, see the landmark case of *R. v. Ron Engineering & Construction (Eastern) Ltd.*, [1981] 1 S.C.R. 111 (S.C.C.) on the contract A, contract B paradigm).

¹⁶⁰ *New West Partnership Trade Agreement*, 2022, online: < NWPTA_May_26_2022.pdf (newwestpartnershiptrade.ca) > [NWPTA].

¹⁶¹ Canadian Free Trade Agreement, 2023, online: < https://www.cfta-alec.ca/canadian-free-trade-agreement/>.

¹⁶² Canada-European Union Comprehensive Economic and Trade Agreement (CETA), 2015, online: <

https://www.international.gc.ca/trade-commerce/trade-agreements-accords-commerciaux/agr-acc/ceta-aecg/text-texte/toc-tdm.aspx?lang=eng >.

government entities, including government owned or controlled corporations or bodies.¹⁶³ The fundamental principles applicable to public procurement are fairness, openness, and transparency.¹⁶⁴

With careful drafting in a call for tenders, an owner can reserve for itself a wider discretion in selecting from the bids than simply taking the lowest compliant bidder. Reserving these rights are often achieved through "privilege" clauses. Owners will regularly reserve for themselves the option to choose a bid other than that with the lowest price.¹⁶⁵ Privilege clauses require careful drafting and will be strictly interpreted against the owner.¹⁶⁶

While careful drafting may alleviate some challenges in running a collaborative contract procurement as the common law is concerned, where a public procurement meets or exceeds a threshold monetary value, the procurement requirements under the trade agreements may apply. There are a variety of exceptions to the open, competitive and transparent procurement requirements set out in the trade agreements, but these apply only in very specific and limited circumstances. For example, Article 14 of the NWPTA will not apply to the procuring entity where an unforeseeable situation of urgency exists and the goods, services or construction could not be obtained in time by means of open procurement procedures.¹⁶⁷ These exceptions are not, however, intended to be relied upon in the normal course.

Due to the early involvement of non-owner parties, successful proponents of collaborative contracts cannot be selected based on price alone. Evaluating criteria like a willingness to collaborate, being a good fit for the project, or presenting interesting solutions during bid evaluation may give rise to an increased likely of claims, or at least complaints, by unsuccessful proponents. Though rate schedules and markups can be compared objectively, parties procuring under collaborative contracts need to ensure that they are able to justify the selection of bidders based on other clearly defined criteria beyond just pricing. Reserving the appropriate discretion by way of a strong privilege clause will be very important.

Proceeding through a procurement on this basis is not expressly adverse to procurement rules in Canada, but parties to a public procurement will want to ensure they have done the appropriate analysis to confirm how they are procuring their partners on a collaborative contract and that the process contemplated complies with the common law and applicable trade agreements.

¹⁶³ (For example, under Article 14 of the NWPTA, regional, local, district and other forms of municipal government, as well as any corporation or entity owned or controlled by one or more of the preceding entities, must provide open and non-discriminatory access to procurements where the procurement value is: (i) \$75,000 or greater for goods; (ii) \$75,000 or greater for services; or (iii) \$200,000 or greater for construction).

¹⁶⁴ Martel Building Ltd. v. R., 2000 SCC 60 (S.C.C.); Tercon Contractors Ltd. v. British Columbia (Minister of Transportation & Highways), 2010 SCC 4 (S.C.C.); M.J.B. Enterprises Ltd. v. Defence Construction (1951) Ltd., [1999] 1 S.C.R. 619 (S.C.C.) [MJB].

¹⁶⁵ (For example, in *MJB* the Supreme Court of Canada upheld a privilege clause allowing the owner to select some bid other than the lowest bid; however, that did not provide discretion to choose a non-compliant bid).

¹⁶⁶ *Heintzman et al* at §3:9.

¹⁶⁷ NWPTA, Part V, C, 2(h).

4. Intellectual Property Rights

Intellectual property rights in collaborative contracts are often a significant issue to resolve between the parties. Owners are not often aware that in some collaborative contracts, their intellectual property rights may be limited when compared to those acquired in traditional approaches, particularly where the arrangement never achieves construction approval. This issue is further exacerbated by the historical proclivity of consultants to seek to limit their liability for design work.¹⁶⁸

There are a variety of concerns over intellectual property regarding construction projects that need to be adequately addressed in a collaborative contract. The owner and the end users of the project need to be able to use and operate the project without restrictions related to intellectual property. The creators and inventors of pre-existing intellectual property need to ensure that they do not lose their rights to pre-existing intellectual property due to their participation in collaboration. The ownership of any intellectual property created during the project itself then needs to be addressed.

During collaboration, there are many opportunities to create intellectual property, but retaining ownership and free use of the intellectual property that may have been jointly created can cause consternation. The Canadian approach has been to transfer such intellectual property to the owner,¹⁶⁹ but without traditional risk allocations for such intellectual property, the creators are often nervous to accept any responsibility for issues that may arise from that intellectual property. This is especially concerning if the owner proceeds to execute the project without the parties who created the intellectual property. In a progressive design-build contract the design-builder will often want to ensure that if the owner proceeds with the project with a different design-builder, or hires a separate contractor to complete the project, that the owner waives its rights to pursue the design-builder for any issues with the initial design work performed.

This creates an issue for the owner as it will have paid to advance the design to a certain state, but is then not be able to pursue the party who was paid for such intellectual property. This can be resolved by ensuring the owner has a step-in right with the design-builder's consultant to continue to engage the consultant who created the design even if the design-builder itself is not retained.

5. Confidentiality of Commercial Terms

In the public infrastructure space where projects are delivered under traditional delivery models, there are a variety of sources and publicly available project documents that provide for an understanding of what commercial terms are "market" for various traditional delivery models even specific to sectors, like highways, hospitals, and light rail transit. This assists parties bidding on public infrastructure projects in streamlining and speeding up negotiations.

Public procurement agencies like Infrastructure BC and Infrastructure Ontario have been willing to make the contract documents for procured projects publicly available (subject to redaction for certain terms). While there are a variety of model forms that are publicly available for certain

¹⁶⁸ Bryan S. Shapiro, "Exploring the Duties and Liabilities of the Design Professional on a Construction Project" (1985) 13 CONSTRLR-ART 7.

¹⁶⁹ *Jobidon*, at pp. 11, 13.

collaborative models like IPD, which has the CCDC 30, the Hanson and Bridget Model, and various international examples, there are relatively few collaborative contracts for projects that have achieved commercial close that are made publicly available.

This creates significant challenges in the market as it is difficult for stakeholders know what is and is not "market" within the commercial terms for collaborative contracts. Only those that were involved in bidding, procuring, or working with a collaborative contract in Canada have a good sense of what is reasonable in respect of commercial terms.

This presents significant concerns for owners wishing to procure a project using a collaborative contract. The market is competitive and "off market" terms could result in little to no bidders. Without a good understanding of what commercial terms will be acceptable to the market an owner may end up losing political capital in the market and be required to undertake time consuming and costly revisions and re-drafting to the commercial terms to attract more bidders. The energy industries willingness to be more open in sharing these forms of agreements may improve the markets understanding of what terms are reasonable in collaborative models.

6. Collaboration is not Free

Not all contracts can be collaborative. The cost to invest time up front to get valuable insight from the various project stakeholders is expensive, especially where those stakeholders lack experience.¹⁷⁰ Most collaborative contracts have significant decision making and administrative requirements that demand time and effort from all parties to prepare for, attend, and assist in the administration of a project.

This requires resources and finances. While there are significant benefits to collaboration such as less change orders, less disputes, and more efficient project management, these benefits come at a cost. The philosophy behind collaboration can be very attractive and introduces many perceived benefits, but once owners understand the price tag associated with collaboration, they may attempt to cut corners and reduce participation. This can result in losing many of the benefits of collaboration.

Understanding the cost of collaboration, determining whether the project can sustain such costs, and ensuring that the parties are willing to invest in the cost to collaborate can assist parties in ensuring collaboration in a project will succeed.

7. Exclusionary Clauses

In Canada, $Tercon^{171}$ establishes that any exclusionary clause is only enforceable if: (i) the exclusion clause in fact applies to the circumstances; (ii) whether the clause was unconscionable at the time the contract was made; and (iii) whether there is an overriding public policy reason for the court to refuse to enforce the clause.

¹⁷⁰ *Roth et al*, at 95.

¹⁷¹ Tercon Contractors Ltd v British Columbia (Transportation and Highways), 2010 SCC 4.

The exclusionary clauses within collaborative contracts have not been tested to date in Canada and it is not entirely clear whether and how courts will view these very broad waivers of liability and limits of liability contained within most collaborative contracts.

Further, in a number of different jurisdictions in Canada parties cannot contract out of limitations legislation. For example, in Alberta, section 7(2) of the *Limitations Act*¹⁷² renders an agreement that purports to provide for the reduction of a limitation period provided by the Act invalid. Courts have inconsistently applied section 7(2) to conventional time-limited rights, such as warranties.¹⁷³ Those drafting these exclusionary clauses should carefully consider how to address any enforceability concerns.

8. **Prompt Payment Legislation and Liens**

Prompt payment legislation is now in effect in several Canadian provinces.¹⁷⁴ This legislation attempts to speed up the process by which parties get paid under construction contracts.

The triggers for payment timelines under these new statutes tie to the receipt of a "proper invoice" by the owner from a contractor. In a collaborative contract with multiple parties the owner may receive multiple invoices from the various parties to such multi party contracts. It is not clear in those circumstances when the payment timelines for lower tier payees would be triggered. For example, it is possible that each of the non-owner participants to the project agreement would constitute a contractor and delivery of its invoice would trigger the timeline separately for itself and any of its own lower tier participants. Ultimately, this may create a complicated web of payment timelines that may be administratively burdensome for all parties involved.

Liens themselves are adversarial and may stop or restrict the future flow of funds. In most provinces, you cannot contract out of the applicable lien legislation.¹⁷⁵ Most collaborative contracts that attempt to waive a party's right to bring claims exclude those claims which cannot be restricted by law. However, as you cannot contract out of the applicable lien legislation, the registration of a lien may have a significant impact on the parties' willingness and ability to collaborate going forward. This is often addressed, by including a provision which provides that as long as the owner has met its payment obligations, the NOPs are required to remove any liens filed against the project. The cost of lien removal may be negotiated as a compensable cost if the lien in question is a result of subcontractor or supplier default, abandonment, or insolvency. This risk can also be mitigated to some extent through the use of labour and material bonds and letters of credit. Inevitably, however, lien rights and, in prompt payment jurisdictions, the right to adjudication cannot be impinged by contract. Thus, even in a "no claims" environment where parties have contractually waived their intention to commence proceedings against one another

¹⁷² Limitations Act, RSA 2000, c L-12, s 7.

¹⁷³ See for example, *NOV Enerflow ULC v. Enerflow Industries Inc.*, 2015 ABQB 759 (Alta. Q.B.) (court held that enforcing expiry dates on representations and warranties does not offend s. 7(2) of the *Limitations Act*) and *Shaver v. Co-operators General Insurance Co.*, 2011 ABCA 367 (Alta. C.A.) (court held that the sole question in applying s. 7(2) of the *Limitations Act* is whether the *Act* would allow the plaintiff to sue past the date specified in the

contract, if so the contract is invalid) or *Wood Buffalo Housing & Development Corp. v. Flett*, 2014 ABQB 537 (Alta. Q.B.) (court held that the waiver in question reduced the limitation period and it was therefore invalid pursuant to s. 7(2) of the *Limitations Act*).

¹⁷⁴ (For example: Alberta, Saskatchewan, and Ontario).

¹⁷⁵ (For example: *Prompt Payment and Construction Lien Act*, RSA 2000, c P-26.4, s. 5).

there may still be options for rogue participants to instigate combative activities. Parties that truly adopt the numerous meetings and communications inherent in these contracts will likely be able to promptly identify the risk of liens and manage and mitigate any negative potential outcomes that result.

9. Lack of Experience

Educated and experienced parties that adopt the philosophies behind collaborative contracts and follow this approach can have successful projects. This requires experience. The Canadian infrastructure space is developing experience with collaborative contracts, but there have not been enough to ensure a widespread knowledge and experience from the contracting community.¹⁷⁶ This can be supplemented by international companies, but they may come with different views about what details a collaborative contract should entail.

The energy sector will have an even bigger issue with experience as not many energy projects in Canada have adopted collaborative approaches. Participants in energy projects will need to hire consultants or partner with experienced players to learn from and develop that experience within the Canadian energy infrastructure sector.

10. Trade Exhaustion

Collaborative contracts usually require an attempt to create some level of price certainty. This price certainty is arrived at by open book procurement followed by contractual commitments from trades. However, due to the amount of time within which the parties are required to price a project and confirm that it is still estimated to be within budget, trades can be approached numerous times to continue to provide and hold pricing. This can lead to exhaustion within the trade community especially where there is a lack of familiarity with the ways in which collaborative contracts are delivered.

In today's economic environment, trades and suppliers will usually only hold bids for very short periods of time. To procure a large collaborative contract, arriving at an agreed price through the mutual decision-making procedures and then going back to the trades to confirm pricing is likely to take longer than the length of time those bids are being held.

There are a variety of procurement approaches that are used to manage this, but it needs to be carefully considered when the parties to a collaborative contract approach the decision gate to arrive at certain, or more certain, pricing.

IX. CONCLUSION AND TIPS FOR SUCCESS

Collaborative contracts are no longer a thought experiment. They are consistently implemented on significant projects in Canada. Based on other regions and industry experiences with collaborative contracts, collaborative contracts provide an opportunity for:

• proactive, rather than reactive, management of projects;

¹⁷⁶ Jones at para 2.1.

- reduced disputes and increased engagement by project participants;
- attracting bidders in a contractor-favourable market;
- realizing good value for money and avoiding paying unnecessarily for exorbitant cost contingencies;
- transforming "bet the company" risks into a shared burden among the parties with appropriate limits;
- acquisition of intellectual property, shared innovation, and increased creativity that may promote profitability for all participants in future work; and
- achieving on time and on budget project delivery.

To be successful with collaborative contracting parties need to be prepared to shift their mentality, align their goals, and continuously improve. Success in collaborative contracting also requires a meaningful investment at the outset to educate. Parties should arrange for team building sessions, which should be focused on defining shared success. Parties also need to define and clearly understand what it looks like to abolish the blame game and how disputes will be resolved.

Project delivery models are not water-tight compartments. Many contracts incorporate and combine multiple conceptual elements from a variety of sources. Effective implementation requires a clear understanding of the project, its participants, and the surrounding circumstances and a careful review of the challenges imbedded in each agreement. Parties need not switch entirely to an unfamiliar contracting model. Incorporating limited collaborative themes into traditional models can also provide some of the benefits of collaborative contracting without abandoning all of that with which the parties may be familiar.

There is a great opportunity for the Canadian energy sector to learn from others and implement collaborative contracts or introduce collaborative themes into their agreements and deliver successful projects in a challenging environment.