

**FOURTH INTERNATIONAL CONSTRUCTION LAW  
CONFERENCE**

**MELBOURNE, 6 – 8 MAY 2012**

**CONSTRUCTION DOCUMENTATION  
PREPARATION – PROTECTING THE EMPLOYER  
WITHOUT BEING UNFAIR TO THE  
CONTRACTOR**

**ACKNOWLEDGEMENT**

**I acknowledge with sincere appreciation the assistance of Professor Doug Jones AM and John Karantonis of Clayton Utz, Sydney, for reviewing my paper and assisting with the more international references.**

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**“CONSTRUCTION DOCUMENTATION PREPARATION –  
PROTECTING THE PRINCIPAL WITHOUT BEING UNFAIR TO  
THE CONTRACTOR”**

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**ABSTRACT**

Many project construction disputes have their origin in:

- inadequate initial design;
- Principals adding Special Conditions which are unnecessarily draconian and grossly unfair to the contractor; or
- the contractor, when tendering, introducing clever tags or amendments designed to enable the contractor to:
  - (a) recover for underbidding;
  - (b) switch all or part of the works onto a “cost plus” basis in circumstances when that would not normally be permitted to happen;
  - (c) in other ways, lay the ground for a “claims based” mentality.

It has become fashionable to endeavour to soften the impact of these tensions through concepts such as partnering, alliancing and sharing in cost savings, whereas a well-drawn contract which correctly and clearly identifies the respective risks taken by the parties may be adequate or even better placed to achieve the same objective.

The thrust of the paper is to identify these common causes of disputes and how to anticipate and address them in the contract in a constructive manner.

The paper includes a number of suggestions and describes the manner in which they have worked in practice and can work alongside the better-known standard forms of contract.

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## CONSTRUCTION DOCUMENT PREPARATION

# PROTECTING THE EMPLOYER WITHOUT BEING UNFAIR TO THE CONTRACTOR

### INTRODUCTION

This is not intended to be an erudite paper.

It is not riddled with references to cases and learned texts and articles.

It *is* intended to provide some helpful practical pointers to the front-end drafters of construction contracts.

While different practitioners will have different drafting techniques, the fact of the matter is that there are many recurring causes of construction disputes and a large number of them are capable of being avoided.

There is no need for the contract to provide draconian protection to the Employer (examples which I have actually seen include an entitlement to delete work where there has not been any default, and being free to give it to others; an obligation to accelerate for any reason without compensation; an obligation to do within the original lump sum contract price a range of things which are invariably treated as variations, and so on). Indeed, this is often done as a defensive step by those who do not know that there is a better way. It has the unhappy and predictable effect of ensuring that the Contractor is disgruntled and is looking for every possible claim opportunity from day one.

Nor is there any need to unwittingly enable a tenderer to avoid steps designed to reasonably protect the Employer. Again, this is often the result of a failure to understand and anticipate situations which might provide good grounds for claims containing a windfall element.

It is quite amazing that there are some Employers in the world who still think that they have an advantage if the Contractor makes a loss.

The recommendations in this paper are intended to provide a balanced approach to:

- secure pricing on a proper basis (not one which is loaded because of unnecessary draconian risks and not one which is light because the Contractor can already see a way of making up the difference!);
- provide confidence in the Employer that if there are valid variations, then the resulting extra payment is confined to recognising truly extra work and not work which the Employer thought was going to be covered by the original contract price; and

- put a dampener over the more claims-minded Contractors because they will see that common avenues of claims have been closed off, yet they will be deprived only of the windfall elements.

Because this paper is addressed to experienced practitioners, it will be sufficient to schedule these causes in summary form. They are not in any particular order of importance.

COMMON CAUSES OF DISPUTES	SUGGESTED SOLUTIONS
<p><b><i>1. Inadequate or late design for traditional contracts, and an inadequate definition of scope for design build contracts:</i></b></p> <p>There is often a tendency to conserve costs until funding is approved/secured and then, when it is, there is a great rush to get the project started. Many problems and disputes can ultimately be traced back to this cause. It is much better to have the design well advanced before seeking prices, or, in respect of design build, spending extra time getting the scope (Employer's Requirements) properly defined.</p>	<p>For large projects, one could do worse than become familiar with the Building Information Modelling (BIM) which, within five years, will be adopted for virtually every UK government project above a certain size.</p> <p>BIM is a digital representation of physical and functional characteristics of a facility. It creates a shared knowledge resource for information about the facility, forming a reliable basis for decisions during the facility's life cycle, from earliest conception to demolition.<sup>1</sup></p> <p>There are four levels from zero to three, Level 3 BIM being a completely open design process.</p> <p>Each project model is contributed to by the design team including design subcontractors. The model can be updated to take account of client change and other additional works. It can be used to determine timing and cost; and to plan the procurement of materials, equipment and manpower ensuring these are at an appropriate level to avoid any over-spend.</p> <p>On completion of the project the model can be used by the Employer to assist the maintenance and occupation of the building.</p>

<sup>1</sup> This is the definition advanced jointly by the Royal Institute of British Architects (RIBA), Construction Project Information Committee and BuildingSMART. I have adopted generally the BIM summary contained in the Construction Law Newsletter issued by UK solicitors Fenwick Elliott on 7 January 2012.

<p>The problem with inadequate design (or an inadequate definition of scope) is that an enormous tension quickly develops between the designer (when the designer or someone connected with the designer is also the certifier) and the Employer. This is because the designer will often be tempted to say that a revision is “for clarification” knowing that the Employer will be very unhappy if the work has to be treated as a variation and paid for as an extra. Designer/certifiers often become tempted to insist that what is really a variation is not. Ultimately, this will get resolved in an arbitration, but much harm is caused by the grief along the way.</p> <p>This difficulty is often compounded by a funding agreement which requires the consent of the funder to extra costs above a certain figure.</p> <p>Unfortunately, many designers, certifiers, funders and Employers find out the hard way that, when English law applies, an arbitrator is free to find that the circumstances have created what is best described as a “deemed variation”. Such a variation</p>	<p>Provided BIM is used correctly and accounted for in the contract documents, it should minimise design conflicts at the design phase prior to the build commencing. Levels 2 and 3 BIM ought to reduce the incidence of professional negligence claims; and delay and disruption claims should, in turn, also decrease.</p> <p>One obvious solution (often easier said than done) is to ensure that the certifier is completely independent of the design team. While the result might be a greater readiness to acknowledge variations arising out of design deficiencies, it should be said (a) the problem would have been avoided if the design had been complete, which is the ideal situation; and (b) it is often cheaper in the long run to acknowledge and pay for that extra work rather than live with increased tension between the parties and an expensive arbitration.</p> <p>The Employer’s Requirements must state the end results and performance requirements to the fullest extent. No method should be stated. Particular care is required when stipulating the use of proprietary materials or systems. Depending on each project, a decision will have to be made as to who bears the risk of such materials or systems failing.</p>
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can be declared by an arbitrator even if a formal variation order has been refused by the Engineer.<sup>2</sup> In similar circumstances, where a variation order has been wrongly refused, the courts have found a remedy through the principles relating to an implied promise to pay,<sup>3</sup> or estoppel,<sup>4</sup> or on the basis of unjust enrichment,<sup>5</sup> or on the basis that the works ordered are outside the scope of the contract and therefore constitute a separate contract.<sup>6</sup>

However, in more recent times, not only has it become quite common for work to be put out for tender when the design is far from complete, but the Contractor is somehow supposed to live with the risk of what will turn up in the future in the designer's mind. Those who try to draft smart clauses to "stick" the Contractor with that risk (for example through "lump sum" or "GMP" techniques) are often behaving irresponsibly.

Your attention is drawn to what I believe is the very important decision in *Multiplex Constructions Pty Limited v Epworth Hospital* (Unreported, Victorian Court of Appeal, Phillips, Charles and Brooking JJA, 28 June 1996).

This is a majority decision of Phillips and Charles JJA with Brooking JA dissenting. All three judges say that the case is unusual based on uncommon special provisions and it is probably for this reason that the

<sup>2</sup> See the line of reasoning adopted in *Brodie v Corporation of Cardiff* [1919] AC 337, *Holland and Hannen and Cubitts (Northern Limited) v Welsh Health Technical Services Organisation* (1983) 18 BLR 80, *State Rail Authority (NSW) v Baulderstone Hornibrook Pty Limited* (1988) 5 Building and Construction Law 117, and at 123 for a list of further authorities. Note that if a contrary intention is clearly stated, it will apply: *WMC Resources Limited v Leighton Contractors Pty Limited* [1999] WASCA 10.

<sup>3</sup> *Liebe v Malloy* (1906) 4 CLR 347.

<sup>4</sup> *Update Constructions Pty Limited v Rozelle Childcare Centre* (1990) 20 NSWLR 251.

<sup>5</sup> *Hill v South Staffs Railway* (1865) 12 LT (NS) 63.

<sup>6</sup> *Pavey & Matthews v Paul* (1987) 61 ALJR 1451.

case has not been reported.

However, contrary to the assumption of their honours, the case does reflect circumstances which, in principle, are all too common in the construction industry. Multiplex tendered a lump sum price of AUD 52.975 million to do extensive work for Epworth Hospital. This included the demolition of some buildings, the refurbishment of others, and the addition of new buildings including a large block for an additional 350 beds.

The variation clause started off in standard form, but it concluded with an additional provision purporting to exclude from being a variation “any change(s) or additional work(s) caused by or resulting from the development of the design of the Works (including, without limitation, the development of the design for that part of the Works not documented or not fully documented as at the date of the Builder's Tender and/or in the Design Development Drawings or the Design Development Specification(s).”

There were other specific provisions making it clear that the Design Development remained incomplete and was to be fully documented. It is also provided that “...the Contract Sum includes all allowances to fully compensate the Builder for all risks and contingencies (whether ascertained or not ascertained) and costs and expenses and any varied, changed or additional works caused by or howsoever resulting from the Design Development of the Works...”

The builder made a claim for over one thousand variations which it said were not caught by the exclusion

relating to design development. The sum claimed was approximately AUD 3.4 million.

Twenty sample items (selected by agreement) were referred to the Special Referee. Four were withdrawn; of the remaining sixteen, eight were held to be variations, five were held to be covered by the exclusion clause and therefore not variations, and three were held to be variations in part.

The Special Referee decided that in respect of “aspects of works fully exposed in the tender documents”, it was only a “refinement” of this which was permitted at the expense of the builder. However, for those aspects in which “the design development process was incomplete or possibly not commenced at tender”, additions or increases in the works might have been, but not necessarily were, at the builder’s cost; each item was to be assessed on its individual merits.

(It was accepted that all changes would have been variations if the exclusionary provision had not been present.)

The report was then the subject of argument before Byrne J who disagreed with the approach adopted by the Referee. Byrne J held that changes to the design did not fall outside the meaning of “design development”, provided that the **function** of a component part of the works was not altered.

He considered that only part of one alleged variation was truly a variation and the matter was referred back to the Referee who issued a second report adopting the approach of Byrne J.

On appeal to the Court of Appeal of Victoria, Brooking JA preferred the reasoning of Byrne J.

However, the majority preferred, generally, the reasoning of the first report of the Special Referee.

As the majority decision summarised the position, "...the redesign of what has already been designed will fall outside the exclusionary proviso...". (And therefore, being something different from design development, was to be treated as a variation.)

In my respectful opinion, the decision of the majority (and the Special Referee) is, unquestionably, correct. Somewhat ironically, the dissenting decision of Brooking JA commenced by saying: "The letting of construction contracts where design is the responsibility of the owner's architect or engineer and at a time when the design is far from complete is a common practice and one which gives rise to many disputes." He then quotes from Joseph T Bockrath, *Dunham & Young's Contracts, Specifications and Law For Engineers*<sup>7</sup> where the dangers of rushed and inadequate preparation of tender design documents is emphasised.

There is nothing wrong with seeking a price for work where the design is not complete; but the contract documents must not only reflect that position, but have within them a fair mechanism for dealing with it. In fact, it is not too difficult to do so. It simply comes down to a careful definition of the scope of work intended to be covered by the original price.

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<sup>7</sup> Joseph T Bockrath, *Dunham & Young's Contracts, Specifications and Law For Engineers*<sup>7</sup> (McGraw-Hill, 4<sup>th</sup> ed, 1986) 249-50.

**2. *Inadequate attempts to preserve entitlement to liquidated damages:***

This arises from a failure to understand (where English law applies) that it is essential to provide an express provision (when it is intended that liquidated damages should apply) which entitles the Engineer to grant an extension of time for prevention or fault by the Employer or any of its consultants. This is because the law will not imply a term permitting an extension, otherwise it would enable the Employer to take advantage of its own wrong. In the end result, time will be set at large and the right to liquidated damages will be lost.

**3. *Inadequate performance specifications:***

This is having an inadequate performance specification when the design risk rests with the Contractor. Whether you represent employers or Contractors, you will be well aware that the moment a specification says how something is to be done (rather than what is to be achieved) there will often be a claim for further work usually involving extra time and extra costs. Even some very experienced engineers writing structural or mechanical or electrical specifications for design build work cannot help themselves but lapse into “how to do it” mode – almost without thinking.

(I cannot resist an anecdote about having a considerable disagreement with a mechanical engineer over the wording of the air volumes and temperature control for an hotel to be designed by the Contractor. He insisted on wanting to stipulate the

Most standard forms contain such a provision, but not all; and many bespoke agreements do not, but should contain such an essential provision.

I have found it helpful with larger projects to have the specifications peer reviewed by independent specialists for the sole purpose of ensuring that the specification is 100% outcomes based.

size and capacity of the fans and the ducting. To make my point, I remember saying to him that if he did it his way and the design build Contractor could not achieve the agreed number of hotel rooms per floor, then that would come back as an additional cost to the owner. Eventually he relented. Just as well because, as you will have quickly guessed, the Contractor adopted a traditional design approach and immediately sought extra money to accomplish the required number of rooms per floor. This was successfully resisted, and it was not unfair to the Contractor which had a very large in-house mechanical engineering design team and was trying on a claim for extra money which the Employer should not have to pay.)

#### ***4. The absence of an effective “catch up” provision:***

Under the old English common law, a Contractor could work at its own pace provided it completed on time – even if it could miraculously finish off the work in the last month. Because of the obvious inadequacy of that law, it became common practice to require the Contractor to work expeditiously. When that didn’t work<sup>8</sup>, it then became fashionable to require programmes to be submitted and for them to be adhered to. When that doesn’t work, there is now something of a vacuum unless there is a very clear requirement for delays (for which the Contractor is responsible) to be caught up within a specific period of time and to apply all of the necessary resources to do

An example of a good solution can be found in the FIDIC 1999 Conditions for Construction, Plant & DB and EPC/T. This suite contains Conditions of Contract for Construction, Conditions of Contract for Plant and Design-Build and Conditions of Contract for EPC/Turnkey projects.

Common to all of them is clause 8.3 dealing with Programme. That provides in part:

**The Contractor shall submit a detailed time programme to the Engineer within 28 days after receiving the notice**

<sup>8</sup> See the very interesting judgement of Coulson J in *Leander Construction Ltd v Mulalley & Co Ltd* [2011] EWHC 3449 (TCC) in which he confirmed that there is no implied term in a construction contract to the effect that a contractor must proceed “regularly and diligently” – even when the contract provides for termination for a failure to proceed regularly and diligently.

so.

Otherwise, it is very tempting for a Contractor to persist with the delay in the hope that there will be an act of prevention by the Employer which ends up exonerating the Contractor from responsibility for its earlier delay. Obvious and common examples are if the Employer is late with drawings or late when supplying materials. It has therefore become necessary to go further than simply requiring “expedition” and “compliance with programmes” and to be able to identify delay which must be caught up within an appropriate period (perhaps one month or two months) with a clear obligation on the Contractor to satisfy the Engineer that appropriate additional resources are being applied; and then providing for an appropriate sanction if the Contractor fails to comply.

***5. The absence of an enforceable acceleration provision:***

This is the inability of the Employer to require acceleration, and pay for it. A real acceleration clause will apply when the Contractor is entitled to a time extension. Then, in the discretion of the Engineer and in respect of all or part of the time extension entitlement, acceleration can be required. Obviously, the Contractor must be properly compensated for accelerating and it is often usual to treat the acceleration requirement as a variation. Because acceleration does not normally come within the usual meaning of variation, it has to be specifically provided for. There is no unfairness about this because if the Contractor is unhappy with the valuation of the cost of accelerating, then the matter can be taken to arbitration just like any other

**under Sub-Clause 8.1 [Commencement of Works]. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor’s obligations. Each programme shall include...**

There needs to be an obligation to provide all necessary additional resources to catch up within a specific period.

The gist of an acceleration clause is to the effect that where the Contractor is entitled to a time extension then, in respect of all or part of that time extension, the Engineer may require the Contractor to overcome that additional time entitlement by the application of sufficient further resources, the cost to be assessed as if the acceleration is a variation.

Some major Contractors will seek to negotiate an additional provision to the intent that there must be prior consultation with the Contractor. That is in order provided it is clear that the requirement for consultation does not fetter the complete discretion of the Engineer.

dispute. Indeed, it is unfair to an Employer to be held to ransom where there is no such entitlement.

An acceleration provision is always necessary, but absolutely essential if the completion date cannot be deferred. For example, a replacement plant which must shut, an hotel opening, or civil works which must be completed before winter.

My pet example of illustrating the importance of retaining the right to manage delays is the example of dewatering the foundations of a plant or a tower building project. A week of lost time (near the beginning) might be caught up by doubling the number of pumps at a cost of say \$x. If that week's delay is not caught up at that time, but has to be caught up in the final week of the project, then the additional cost could be **\$x x 100** or more, for exactly the same length of delay.

***6. The need for an option to accept defective work and receive compensation:***

This issue needs to be addressed, not because the Employer is necessarily without legal rights, but to address the enormous leverage which a Contractor might have if there is defective work and the essential time to complete is running out.

Assume that the generator for a power station must meet a minimum rating of 97% of theoretical capacity. The turbine is installed and when tested achieves only 91%. Of course, the Employer has many obvious rights – but that is not the point. A mischievous Contractor, knowing of the horrendous consequences to the Employer, might keep a poker face and indicate that the turbine must be

Some standard forms do contain such a provision – see, for example, FIDIC Yellow Book - Conditions of Contract for Plant and Design-Build: For Electrical and Mechanical Plant, and for Building and Engineering Works, Designed by the Contractor.

I have provided in many contracts in New Zealand for that compensation to be the higher of the notional cost of remedy or the remedial cost avoided by the Contractor.

I would have to accept that might be a tad draconian, but it certainly provides the right incentive to get things right.

removed and returned to the place of manufacture. There will be a clear contractual obligation on the Contractor to remedy the defect.

In this situation, an Employer might be coerced into foregoing certain rights simply to get the power station up and running.

It is therefore essential to provide, in relation to defects, that the Employer has the option of accepting defective work and being compensated for it (as determined by the Engineer or in some other way).

***7. Difficulties varying a major production run:***

There can be very high value long-lead items which necessitate the Contractor or supplier gearing up for a major production run.

Examples include the manufacture of trains, aeroplanes, and tunnel lining.

The suppliers will often negotiate very hard for contractual provisions which require their agreement to any variation. They say that they cannot afford delays to the production run because of their obligations to subsequent customers and that the complexities arising from variations once production has started are such that their agreement must be required; they should not be exposed to a binding obligation to vary the work, they say.

Of course, one can understand their dilemma and that reasoning.

However, what this means, in practice, is that the purchaser can effectively be held to ransom regarding whether or not the varied work is done and the price for it; and

There is still nothing wrong in principle whereby varied work can be required and the cost and time consequences of that variation can be appropriately valued – even if the valuer has to be someone with special skills nominated for that purpose. It may well be that an indicative realistic cost from the valuer will be sufficient to persuade the Employer to withdraw the request. However, my main point is that the price and time consequences of such variations (as with any other) should not be for the unilateral decision of the supplier/contractor.

I have first-hand knowledge and experience of a major supplier backing down and eventually agreeing to live with the decision of an independent certifier.

any possible delay.

**8. *Inadequate attention to limiting ambiguities and discrepancies:***

We are all familiar with the standard provisions in this regard and the usual order of precedence. However, this standard approach will often be inadequate and leave some pretty difficult issues to be determined in arbitration.

The possibility of later conflict can be substantially diminished by including in the contract documents (and having a very high order of precedence) a section which might be described as “Overarching Basis of Agreement”. That section can state in plain language and in not more than a few pages even for a very large project, the real nub of the deal. It will focus on the intended end result and be in language easily understood by a bright teenager! Having used this technique on a number of occasions, I know that it has had the effect of resolving what might otherwise have become ambiguities or discrepancies.

**9. *Inadequate identification of risks:***

Imagine, for a moment, the contract documentation for a major plant. It will stand several metres high if in one pile.

Once the successful “bid team” has eagerly passed this material to the “construction team”, one of the first steps usually undertaken by those who are going to do the job is to review all of the documentation to identify all of the possible risks.

These are often quite difficult to identify and, even where a particular risk is obvious, it may not be so obvious as to where it lies.

During the last few years, a major Employer in Auckland has been experimenting with the inclusion of a document called a “Risk Schedule”. This is in tabular form and is intended to capture all of the significant risks and to summarise the contractual provisions which deal with them. Such an approach is not without risk in itself, but so far it has been helpful and has not led to difficulties. I advance this possible solution with caution and simply add that certain projects might lend themselves to this approach and others will not.

## **COMMENTS ON SOME STANDARD FORMS**

I have attempted to deal with these in the Appendix.

In broad summary, many standard forms do not address some of the more important solutions which I have recommended. When using any standard form, I would recommend that it be analysed with the above nine points in

mind (along with all of the others which will be on your individual check lists).

## **ALLIANCING, PARTNERING, TARGET COST AND SIMILAR ARRANGEMENTS**

There is a very important need for some reliable research to be undertaken to identify the real additional cost incurred by Employers as a result of entering into some of these kinds of arrangements.

While there might be a more cooperative atmosphere within the relationship, there is inadequate information about their real cost.

For example, as a result of some research undertaken by Wood P and Duffield C, 'In Pursuit of Additional Value: A benchmarking study into alliancing in the Australian Public Sector' (Research Report, Victorian Department of Treasury, October 2009) some very interesting findings were published.

The cost of alliancing and partnering projects in Victoria turned out to be up to 50% higher than the estimated cost contained in the original business case for the project.

This compared with an increase of only 20% when traditional forms of contract were used.

In New Zealand, I have been provided with some helpful comparisons between the original budget cost and the Alliance Target Out-turn Costs (TOC).

On seven projects (quite large for New Zealand) the comparison is:

- Project One – the agreed TOC was in line with the budget.
- Project Two – the TOC was over budget, but there is a suggestion that the budget was obviously too low to start with.
- Project Three – the TOC exceeded the budget.
- Project Four – the TOC was \$60 million below budget.
- Project Five – the TOC was below budget.
- Project Six – the TOC is currently below budget.
- Project Seven – a project in the early stages, but it does appear that the cost will be above the budget.

I am in no doubt that, in respect of some projects, savings can be demonstrated, but the statistics just mentioned (particularly in Australia) clearly demonstrate the need for reliable research in a number of states and countries.

## CONCLUDING COMMENTS

Draconian obligations imposed upon a Contractor are counterproductive and usually do not achieve the desired result. This is because of the damaged relationship from the start and the incentive on the Contractor to look for every conceivable avenue which softens the impact of the draconian provision.

Equally, Contractors who are obsessed with making claims for every conceivable reason cause enormous damage to the relationship and bring considerable additional expense to both sides. They jeopardise their selection for future work.

The popularity of partnering and alliancing, and other arrangements such as sharing savings and additional costs, are all borne out of a desire to avoid one side or the other from being “stung”.

Those arrangements appear to work well in that better relationships develop – but possibly at a high cost on some projects.

I invite you to carefully consider whether or not a well-drawn contract which intelligently identifies common causes of disputes and avoids them in a fair and reasonable manner, might not be a simpler and better approach.

## ACKNOWLEDGMENT

I acknowledge with sincere appreciation the assistance of Professor Doug Jones AM and John Karantonis of Clayton Utz, Sydney, for reviewing my paper and assisting with the more international references.

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**APPENDIX**

**COMMENTS ON SOME STANDARD FORMS**

## COMMENTS ON SOME STANDARD FORMS

### INTERNATIONAL:

- **FIDIC Conditions of Contract of Design, Build & Operate Projects – First Edition 2008 (Gold Book)**

A variation is defined as varying the Employer's Requirements. Clause 9.3 deals with extensions of time and Clause 9.5 has some catch up provisions.

However, there does not appear to be any power to require acceleration. There is a traditional extension of time provision and some catch-up requirements.

- **FIDIC Conditions for Construction, Plant & DB and EPC/T 1999**

Clause 8.6 has a good catch up provision, but there does not appear to be any power to require acceleration.

### UK:

- **JCT Design-Build Contract Rev 1 2007**

There is the usual provision for a "Change" to the Employer's Requirements.

"Change" is defined in Clause 5.1 and does not include the power to reduce the time by requiring acceleration and paying for the additional resources required.

This does not appear to permit acceleration to be ordered as of right.

- **NEC 3 Engineering and Construction Contract June 2005 (including amendments to 2006)**

Again, there does not appear to be any power to accelerate as of right.

The early warning provision (Clause 16) calls for cooperation. The acceleration provision (Clause 36) calls for a quotation and agreement.

### AUSTRALIA:

- **Australian Standard AS 4000-1997 General Conditions of Contract**

This standard form also does not include any express power to accelerate, however Clause 34.4b of the contract directs the

Superintendent (Engineer) to disregard questions of whether the Contractor can accelerate when assessing claims for extensions of time.

Loots and Charrett, in their "*Practical Guide to Engineering and Construction Contracts*"<sup>9</sup> suggest the following model acceleration clause to be inserted under the programming clause (Clause 32) of the contract to make it more "employer friendly":

### *32A Acceleration*

- (a) *The Superintendent may, at any time, direct the Contractor in writing to provide the Superintendent with the following information in relation to the proposed acceleration of the WUC ("Contractor's Acceleration Proposal"):*
  - (i) *details of the additional labour and construction plant which the Contractor considers shall be required to comply with the proposed acceleration;*
  - (ii) *an estimate of the hours of work which shall be required to be performed by the Contractor outside the working hours or the working days defined in the Contract and the construction program to enable the Contractor to achieve the proposed acceleration;*
  - (iii) *details of additional supervision which the Contractor shall be required to provide to achieve the proposed acceleration;*
  - (iv) *the Contractor's extra costs and expenses which it may incur in achieving the proposed acceleration, which must be reasonable and substantiated;*
  - (v) *a draft revised construction program showing the proposed revised date for practical completion which shall, subject to approval in accordance with Clause 32, be implemented to achieve the proposed acceleration.*
- (b) *The Contractor shall provide the Superintendent with the Contractor's Acceleration Proposal within 7 days of receipt of the direction given under Clause 32A (a).*
- (c) *On receipt of the Contractor's Acceleration Proposal, the Superintendent may do any one of the following:*
  - (i) *advise the Contractor by notice in writing which expressly refers to the Contractor's Acceleration Proposal, that the Principal accepts the Contractor's Acceleration Proposal in*

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<sup>9</sup> Loots P and Charrett D, *Practical Guide to Engineering and Construction Contracts* (CCH, 2009).

*which case, subject to Clause 34.1, the date for practical completion shall be revised to the date contained in the Contractor's Acceleration Proposal and the contract sum shall be adjusted by the amount accepted by the Principal in the Contractor's Acceleration Proposal; or*

*(ii) reject the Contractor's Acceleration Proposal and either:*

*(A) inform the Contractor there will be no acceleration of the WUC; or*

*(B) require that the Contractor's extra costs and expenses associated with the direction to accelerate under Clause 32A be determined under Clause 36.4.<sup>10</sup>*

Clauses 39.7, 39.8 and 39.9 of the contract stipulate, respectively, the conditions under which the Principal (Employer) is considered to have committed a substantial breach of the Contract, the requirement of the Principal to show cause and the rights to remedies and damages entitled to the Contractor in such circumstances. None of these clauses however provide an express provision which entitles the Engineer to grant extensions of time for breach or prevention on the Employer's behalf. Extensions of time are dealt with in Clauses 34.3, 34.4 and 34.5 and there is no entitlement to grant for Employer's breach or prevention here either.

Clause 32 discusses programming, however does not make use of any meaningful catch up provisions for works behind schedule.

The Principal's acceptance of defective work is addressed in Clause 29.4, which stipulates that such acceptance is to be considered a deemed variation. The clause does not, however, expressly provide for the Employer's compensation from the Contractor in these circumstances.

- **Australian Standard AS 4902-2000 General Conditions of Contract for Design and Construct**

Much like in AS 4000, there does not appear to be any power to accelerate. Clause 34.4(b) of this contract also directs the Superintendent to disregard questions of whether the Contractor can accelerate when assessing claims for extensions of time.

Again, Clauses 39.7, 39.8 and 39.9 of this contract address breaches by the Principal and related rights to damages and other remedies of the Contractor, however there is no express provision which entitles the Engineer to grant extensions of time. Extensions of time are expressly

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<sup>10</sup> Ibid 159.

dealt with in Clauses 34.3, 34.4 and 34.5, and no such authority to grant for Employer's breach or prevention is provided here either.

Clause 32 discusses programming but there is no implementation of any useful catch up provisions.

The Principal's acceptance of defective work is dealt with in Clause 29.4 and is classified as a deemed variation. As in AS 4000, there seems to be no provision for Employer's compensation from the Contractor in this contract.

### **HONG KONG:**

- **The Government of the Hong Kong Special Administrative Region general Conditions of Contract for Building Works 1999 Edition**

Clause 50 deals with extensions of time, however there appears to be no clear power to accelerate as of right.

Some useful catch up provisions are provided in Clause 51(1) and 51(2) of the standard form. Clause 51(1) allows the Architect (otherwise, Superintendent or Engineer) the right to communicate its opinion that the rate of progress of certain works is too slow, by writing to the Contractor, whereby the Contractor is required to immediately take necessary steps to expedite the completion of the works in question.

An effective (and more forceful) second catch up provision is found in Clause 51(2) of the contract; the Architect is empowered to *instruct* the Contractor in writing to carry out works during *any hours of the day* where the Architect considers it necessary owing to the slow progress of the Contractor. There is no clear requirement here for the Contractor to amend the programme for construction (referred to in Clause 16(1)), and there seems to be no provision for consultation between Architect and Contractor in relation to the accelerated program of the works behind schedule; the Architect appears to have complete power under such circumstances.

Clauses 88(1), 88(2) and 88(3) address breaches by the Employer, however breaches discussed are limited to non-payments to the Contractor, and the Contractor's remedies are very limited. There are no provisions here for extensions of time as a result of the Employer's breach.

Defects are addressed in Clauses 56 and 58, however there is no option for the Employer to accept defective work and receive compensation.

**SINGAPORE:**

- **Building and Construction Authority Public Sector Standard Conditions of Contract for Construction Works 2008**

Clause 9.2 addresses the revision of the construction programme and Clause 15 deals explicitly with expediting the progress of works. Both provide some effective catch up provisions for slow progress. The Superintending Officer (Engineer) may request the Contractor to supply additional particulars or submit a revised/modified programme for the expedited completion of the works in question, and the Contractor is entitled to seek the Superintending Officer's consent to work on Sundays/public holidays if it considers it necessary.

Various reasons for extensions of time are discussed in Clause 14.2, and more specifically Clause 14.2(n) allows for the extension of time for 'any act of prevention or breach of contract by the Employer...!.

Clause 22.1 outlines some breaches of the Employer which entitles the Contractor to all losses, expenses, costs or damages associated with the breach. Also, as in Clause 14.2(n) above, Clause 22.1(i) allows for the claim for loss and expense arising out of 'any act of prevention or breach of contract by the Employer...!'. The contract, however, does not appear to devote a clause to default or breach by the Employer and the associated rights of the Contractor in such circumstances.

The extension of time and programme for the works clauses do not provide any clear provisions for the power to accelerate.

Clauses 10.7 and 18 address defects, however no option for the Employer to accept defective work and receive compensation is incorporated.

**NEW ZEALAND:**

- **NZS 3910:2003**

There is no right to require acceleration. There is a provision called "Acceleration" (10.3.6), but it requires the clear agreement of both sides. It is not unilaterally enforceable by the Employer.

Also, this Standard does not have an obvious general time extension provision permitting an extension of time for prevention or fault by the Employer or its consultants. Instead, the authors have adopted a very unusual and potentially dangerous approach whereby they have tried to identify specific acts of default or prevention and then state that such matters will be dealt with as if they were a variation. There seems to be about thirteen:

- 5.4.6 – Links to 7.1.2 where the cost of making good is to be treated as a variation if it arises from an excepted risk.
- 5.5.2 – Actions of separate Contractors.
- 5.6.5 – Damage from excepted risks.
- 5.8.5 – Supply of incorrect information.
- 5.11.6 – Compliance with licences.
- 5.13.4 – Unforeseen utilities.
- 5.14.2 – Treasure.
- 5.16 – Late supply by Employer.
- 6.2.4 – Failure by Engineer to carry out duties properly.
- 6.4.4 – Delay caused to inspection or testing.
- 6.6.4 – Delay by Employer in issuing a Practical Completion Certificate or Defects Liability Certificate.
- 6.7.3 – Suspension.
- 10.7.4 – Occupancy by Employer.

There must be many examples of other situations which should be a ground for extension of time for fault or prevention. If a situation arises amounting to prevention or default which has not been identified amongst the thirteen cases specifically addressed, then it would seem that, where liquidated damages are intended to apply, there is a risk that time will be set at large.

It is possible that the above criticism has been addressed in the Guidelines which state:

**These Guidelines are part of NZS 3910 and have contractual status as between the Principal and the Contractor, but only to the extent that they may be referred to as an aid to the interpretation of the substantive clauses ...**

Guideline 10.3 refers to GC 10.3.1(f) which provides for a fair entitlement to an extension of time by reason of:

**any circumstances not reasonably foreseeable by an experienced Contractor at the time of tendering and not due to the fault of the Contractor.**

It then goes on to say:

**Examples of circumstances which in a particular case might fall under paragraph (f) of this clause are delays in the supply of Materials or Plant from overseas, delays arising from environmental objections or political decisions, delays caused by vandalism and breaches of contract or other acts or omissions of the Principal or of any Person for whose acts or omissions the Principal is responsible.**

The difficulty with this provision (even though said to be binding as between the parties to the construction contract) is that the last part of it, "...and breaches of contract or other acts or omissions of the Principal or of any Person for whose acts or omissions the Principal is responsible" is completely contrary to the common law – in fact it purports to reverse what the law would otherwise be.

The authors of this standard may have succeeded with their intention or they may not. If the enforceability of this provision comes under judicial scrutiny, there has to be a possibility that these words will fall short of what are necessary to preserve an entitlement to grant time extensions for the Employer's fault or actual prevention.

When one compares the very cumbersome approach adopted in the New Zealand Standard with the simplicity of some other Standard forms which address this issue, it is difficult to know why such a complicated and risky approach has been adopted.

And it is even more difficult to understand why the critical words which might "save the day" are hidden away in such an obscure location.