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SEMINAR ON DRAFTING OF BUILDING AND ENGINEERING CONTRACTS

OBLIGATIONS AND DUTIES OF CONTRACTING PARTIES

1. **The Professions involved in Building and Engineering Contracts**

The planning and implementation of building and engineering contracts requires team effort and input by many different trades. For example, the following items of works and supply will be involved in the construction of say an apartment block:

- a. Land surveying and setting out
- b. Earthworks
- c. Piling
- d. Sub and superstructure works (i.e. reinforced concrete to the foundations and building frame)
- e. Bricklaying
- f. Plastering
- g. Painting
- h. Glazing (windows)
- i. Carpentry (to doors and window frames)
- j. Plumbing
- k. Sanitary fittings
- l. Electrical wiring, electrical equipment and fitting
- m. Fire fighting
- n. Outfitting (cabinets, built in furniture, etc)
- o. Air-conditioning and ventilation (sometimes)
- p. LPG
- q. Lifts
- r. Landscaping

It can be seen that in order to handle the above trades, quite a few categories of professionals need to be involved either on the team of the project owner or of the design and build contractor. They are:

- a. Land surveyor (for a)
- b. Civil and structural engineer (for b, c, d)
- c. Architect (for e, f, g, h, i)
- d. Mechanical and electrical (“M&E”)engineers (for j to m, o, p, q)
- e. Interior designer (for n)
- f. Landscape designer (for r)
- g. Quantity surveyors for estimating the quantities and costs and managing of the contract (in Commonwealth countries as a matter of tradition)

The broad functions of the various categories of professions are as follows:

Architect

The architect is the person who has overall control of a building project and the allocation of the trades to the respective professionals above does not do justice to this fact. For example, whilst a civil engineer designs the reinforcement and grade of concrete to be used, it is the architect who actually decides what is the minimum clearance in a basement car park when a project owner is concerned with minimizing the cost of constructing the basement of a block of apartments.

Apart from aesthetics, the architect is also concerned with functionality. For example, the architect will be concerned to ensure that the requirements of the relevant building bylaws in respect of lighting, ventilation, and fire escape considerations are met.

In the above respect, an architect has important functions to play at the planning and construction stages of building projects in respect of obtaining the necessary approvals for projects. In the former case he is responsible to ensure that the basic requirements for approval of the project such as for example the clearances between a proposed building and an existing building, and the sufficiency of roads to a new housing estate are met. At implementation stage an architect has to be mindful that any modifications to the design of a drawing (and of course the original design) do not breach the requirements of the building bylaws so as to prevent the issuance of the certificate of fitness.

It needs to be borne in mind that it is the norm in building contracts for the architect to be the main party recognized as representing the building owner with all other parties, i.e. the engineer(s) and the quantity coming under his umbrella. For example, under the Pertubuhan Arkitek Malaysia (“PAM”) Form of Contract, the Architect is the main person referred to in the Conditions of Contract, although engineers and QSs are recognized with final approval of all matters including payment certificates, variations come under his purview. The role of engineers appointed is subordinate to that of the Architect (see Clause 10.1). There are routine matters of an engineering nature in respect of which the Architect may empower the resident engineer to give approval for and this requires the proper delegation of authority. This would include for example approval of the preparatory works prior to covering up such as by means of concreting.

Engineers

The civil engineer’s main concern is to ensure the stability and soundness of the foundations and concrete works. The latter involves the requirements of the concrete to withstand fire, and ability to prevent leakage of water from an upper to a lower floor.

The M&E engineer will be concerned to ensure that the cables are adequate to carry the required current without catching fire, that the ducting is adequate to carry the required air flow to ensure adequate ventilation, and that the water pumps are adequate to pump water from the basement to the tanks at the various levels.

Quantity surveyor

The quantity surveyor (“QS”) is concerned with taking off (i.e. measuring from drawings and calculating) of the quantities and preparing the bills or schedules of quantities and the appropriate conditions of contracts and compiling these together with the appropriate specifications prepared by the relevant engineers and the architect (and ID and landscape designer too).

The QS will be concerned at the implementation and contract closing stage to ensure that the project budget is deviated from only in deserving cases.

The architect v the civil engineer

It needs to be noted that infrastructure projects are normally run by essentially civil engineers without input by architects. Examples are highways, earthworks to a housing project, and dams although in the 2nd case, the engineer will do so in consultation with the architect who will provide his layout plan for the civil engineer to work to.

2. **Architects and Engineers (“A/E”)**

In these notes references to the architect would also include reference to the engineer as the functions and duties of the two are similar with the latter taking the position of the former in construction contracts which do not require the appointment of an architect.

Even when an engineer is employed by an architect to do checks on his behalf, the engineer would owe the same duty of care as if the engineer were directly employed by the owner¹.

2.1 Dual role of architect

An architect plays a dual role in the administration of construction contracts although quite often a particular function may include a greater element of one role and at the same time also include an element of the other function.

The first role is as the agent of the project owner. In this capacity an architect would for example indicate to the contractor the types of material which are to be incorporated into a building and accept or reject the materials which the contractor would then propose.

Once the type of material has been accepted, the architect will then act in his second role to decide and act in a quasi-judicial capacity whether material actually supplied is up to the specification and approved sample. He will also decide whether for example the installation of the materials are in accordance with the specification.

The second role very importantly includes ascertaining and certifying payments, quite often with input by quantity surveyors. It is often in this role that an architect is under pressure to for example under certify or delay certification as it has to be borne in

¹ See *Moresk v Hicks* [1996] 2 Lloyd's Rep. 338

mind that it is the project owner who pays him! It can also be argued that in this role, the architect is also acting as an agent of the owner in deciding how much payment is due to the contractor.

2.1.1 Duties and liabilities of an architect to the owner

It follows that the architect will be liable to a project owner in the following respects:

As a certifier

The architect will be liable if for example he certifies defective work to be otherwise, if he over certifies a progress payment and the contractor absconds without completing the works, over certifies the final account, or fails to require rectification of defective works thus causing the owner difficulty in recovering from a contractor the cost of repair.

As a designer

The A/E is responsible to the owner for the proper design of a project and will be liable in the following circumstances following deficiencies in the design (this can be in the form of errors in calculations, inadequate specification, errors in the drawings, errors in accepting samples):

- cause delay in the issuance of the Certificate of Fitness or imposition of penalty;
- causes failure and necessitates the contractor to do additional works;
- the defects are discovered before construction and there is no abortive costs but additional expense not budgeted needs to be incurred; and
- failure causing damage to the works and/or adjoining properties;

As a construction supervisor

An A/E cannot absolve himself from liability if there has been a want of care by his site supervisor who has failed to pick out shortcomings in observance of the specifications by a contractor. But it needs to be noted that an employer in such a situation possesses a right of recovery against both the contractor and the A/E as

almost all standard forms of construction contracts require that no certificates by the A/E shall be conclusive proof of satisfaction of the requirements of the contract.

Delays or failure to supply construction drawings

In the event of delay to provide necessary details in time, the contractor under most forms of construction contracts will be entitled to an extension of time and to claim against the owner for additional expenses incurred.

If however an A/E fails to provide necessary drawings, and the contractor is unable to proceed with the works and rescinds the contract or the time for completion becomes at large.

In both the above instances the losses suffered by the owner such as those resulting from the contractor's claims as a result of delay, loss of rental, and additional financing charges would be recoverable from the A/E.

Errors in estimating quantities

If an A/E takes it on himself to take off the quantities (and the same principle applies in the case of a quantity surveyor who is employed) and does so erroneously and the contract is a lump sum contract with the result that the owner has to pay more for the works, the owner will be entitled to recover from the A/E (or quantity surveyor).

2.1.2 Duties and liabilities of an architect to the contractor

It is almost a rule in construction law that an architect can (almost) never be liable to the contractor as the architect's contract is with the owner and (as long as the architect acts within his authority, actual or ostensible) the architect acts only as the agent of the owner. The only exception is when the architect misrepresents the extent of his authority to authorize variations and the contractor acts on reliance on the same²

3. Physical peculiarities of construction works

The two aspects of construction contracts which are almost unique and which distinguish them from other contracts are:

² See *Randell v Trimen* [1856] 18 CB 786

1. Owner's entitlement (and contractor's entitlement to be given) to enlarge (extend) time for completion and the related issue of time based liquidated damages
2. Owner's entitlement to vary the contract subject to the contractor's right to payment with elaborate mechanism provided for the exercise of this right

Other features of construction contracts (also found in certain other types of contracts) include:

- Extensive insurance provisions
- Provision of security
- Exhaustive specifications
- Rights of termination specifically provided for in the contract rather than solely depending on common law rights
- Rights of suspension
- Provision of payment to be made on a progressive as against on a "one time" basis

These legal/contractual characteristics of construction contracts are responses resulting from the physical characteristics of construction contracts as follows:

Long delivery period - construction contracts characteristically allow construction periods of 18 to 30 months. A lot of things can happen during the period. There can be a drop in demand for the product for which a factory is being built. Or a suicide bomber might have bombed a resort island on which a hotel is being built. Alternatively, the country may have declared war on a neighbouring country or there is a change of government. An owner or contractor getting into financial difficulties in the course of construction is not uncommon.

Because of this a contractor needs to be paid on a periodic basis rather than have to wait for 18 to 36 months and after spending tens of millions before finally getting paid.

Goes into great details – it is not uncommon for the drawings to go into 100 pieces of A1 size drawings and the specification to go into 100 pages. Or for the Bills of Quantities to go into hundreds of items.

It is also usual for details to be outstanding at the time of awarding a construction contract with the result that further drawings are issued in the course of construction.

Cover extensive area or construction deep into the ground – a construction site can cover very extensive areas. For example a university or hospital may cover hundreds of acres and a highway package may be 10, 20, or 30 kms long. A deep basement car park may go into 5 or 6 levels deep. A dam may be some 100m high and kms wide.

It is practically impossible to find out everything about the ground. When constructing a deep basement car park you can encounter a piece of rock measuring some 10m in diameter. It is possible that a pile can reach set after reaching a depth of 10m whilst the adjacent piles (3m away) are driven to depths of 16m or vice versa. A development covering hundreds of acres with a cut slope could find the area of the slope to be made of poor soil requiring slope strengthening works.

Also when the works cover an extensive area, the quantities of the earth to be excavated becomes uncertain.

Special technology requirements – this will include works for an electronic components factory, a power station, a hospital, an energy efficient office block. Such installations normally go into great details. As a result, successful delivery requires good coordination amongst not only the design team but also amongst the main contractor and specialist sub-contractors involved not only in the various trades but also supply and install specialist equipment. It is not unusual that the specifications are found to be inadequate during construction or new technology is developed.

4. **Standard features of construction contracts**

It follows naturally from 2 that in order for construction contracts to be operable and that the respective parties' rights are adequately safeguarded, they must as standard features allow for the following:

4.1 **Power to instruct variations**

4.1.1 *The power to instruct*

In ordinary contracts, such as for example for sale and purchase, the parties would have negotiated on a few basic points and reached agreement before signing the contract. In the case of the sale and purchase of land, the important points are the price, the identity of the property, the payment terms, and liquidated damages in the event of failure to conclude the sale. A variation will in this context involve for example an agreement on say the schedule for payments and perhaps an increase or reduction in the total amount to be paid depending on whether the buyer is given more time or less time to complete payments. In this case, the change will require the consent of both parties.

However in the case of construction contracts, almost invariably in all construction contracts, the owner would want to make changes while the works are going on. This may be a result of errors in the contract drawings or a change in the owner's requirements as a result of changing economic climate such as for example in the case of a factory for the manufacture of computer memory a surge in the price of RAM. As such a mechanism must be included in construction contracts for on course changes to be instructed as of right rather than with the consent of the contractor.

Variations can include changes to the "form quality or quantity of the Works" and includes increases or decreases in quantities of works included in a contract, omission of such works, changes in character or quality or kind of any such work, changes in the levels, lines, position and dimensions of any part of a contract works, or the execution of any additional works of any kind necessary for the completion of any contract work (see Clause 23(a) IEM Conditions of Contract).

The PAM Conditions includes a provision similar to that of the IEM Form but it additionally includes the restriction of hours of work, restrictions in working space or access to the site or parts of it as variations (see Clause 11.1).

Invariably, all standard forms of contracts require that the carrying out of variations by contractors will require to have been authorized in writing by the A/E and in fact some forms of contract go so far as to require all instructions to be issued in standard pre-numbered forms.

4.1.2 *Payment for variations*

4.1.2.1 By varying the rates

The main problem with regard to this is often whether compliance with an instruction constitutes a variation and also the rates to be paid for the affected works. Thus when there is an omission the contractor will try to argue that a lower rate will apply whilst where there is an addition the contractor will not only argue that a rate higher than that of a similar item in the Bills of Quantities or Schedule of Rates but often that the rate should be much higher.

The applicable rates are usually assessed by reference to the rates for similar items and comparing the varied works against the same. In this respect the IEM Conditions (clause 24(a)) merely states that rates set out in the contract shall be applicable but if the contract does not include applicable rates then the rates shall be agreed upon between the Engineer and the Contractor. Whereas in the PAM Conditions (Clause 11.5 (ii)) if the work is of similar character to work included in the Bills but not carried out in similar conditions the rates included in the Bills shall form the basis for setting the new rates, taking into account the difference in conditions. An example of this will be an instruction to use the same material but to change the finishing of the material.

The onus is on the contractor to justify any varied rates it requires to be paid. Towards this end, contractors should keep sufficient records to substantiate any such.

4.1.2.2 By dayworks

This method of evaluating any variations is normally suitable only for smaller variations as it is a disincentive for contractors to properly utilize their resources as the contractor will be paid for all its resources regardless of how it is using them.

Under this method the contractor records all resources (plant, machineries, materials, and labour) and it gets paid at rates which are included in the contract (or negotiated between the parties).

4.2 Power to extend time for completion

4.2.1 *Time becoming “at large”*

As a corollary of 3.1 it is necessary to allow the time for completion to be extended as it often happens that a contractor will suffer delay as a result of carrying variations. In the absence of such a power, section 47 of the Contracts Act which stipulates that if the parties to a contract have not agreed on a time within which a party is to discharge its obligations then the party which is required to do so may discharge its obligations within a reasonable time will kick in. This follows from the fact that as an owner has delayed his contractor from completing within the contractual date, then the contractor is freed from his obligation. In such a situation the time for completion is said to have become “at large”.

4.2.2 *Circumstances which normally entitle the contractor to an extension of time*

However, the power to extend time for completion is not confined to instances of the execution of variations. The PAM Conditions for example in Clause 23.7 provides for extension of time in the following instances:

- By reason of a force majeure – this would include occurrences such as a war, sinking of a ship bringing specialist equipment – (i)
- Exceptionally inclement weather. This does not mean that just because 300mm of rain falls in December, 2000, there would automatically be extension of time for the days on which rain fell – (ii)
- Occurrence of risk covered by insurance. Thus occurrence of storm, fire, explosion, damage caused by aircraft, and flood would entitle the contractor to an extension. It is interesting to note that in another form of contract the entitlement

is subject to the occurrence not having been brought about by the contractor's negligence. – (iii)

- Civil commotion, strikes, or lockouts which may affect the progress of the works – (iv)
- An instruction issued by the Architect under Clause 1.2 (discrepancy within Contract Documents), 11.2 (variations), 21.1 (delay in site possession), 21.4 (postponement of any work). The right to an extension of time under this is subjected to the implied condition that the instruction had not been given to redress a default of the contractor. – (v)
- Delay in issuance of Drawings, information, instructions, details, or Drawings by the Architect. This is to cover a situation in which the Architect holds back for example setting out information perhaps while pondering a design consideration. –(vi)
- It is interesting to note that the contractor is made responsible for a default of his nominated sub-contractor as only delays due to no shortcoming of the nominated sub-contractor would entitle the contractor to an extension of time. In this paragraph the Contractor would be entitled to an extension of time for delays by his NSC if the delays by his NSC were caused by the same factors as those which would enable the Contractor to an extension - (vii)
- An act of prevention or breach of contract by the Employer not specifically mentioned in Clause 23.7. This clause is interestingly put here to prevent time becoming at large if the Employer causes a delay of a nature not contemplated – (xi)

4.2.3 *Notification of delay and application for extension of time*

Both the IEM and PAM Forms of Contract do not stipulate the timeframes within which the contractor is to notify the E/A of a delay and apply for an extension of time. The IEM Conditions stipulates that “*upon its becoming reasonably apparent that the progress of the Works is delayed, the Contractor shall forthwith give written notice ...*”(Clause 43) and the PAM Conditions contains a similar provision in Clause 23.1. A very important question to ask in the Malaysian context is “whether a delay in notifying the A/E of a delay will disentitle a contractor to an extension of time?”. The

answer is that it generally will not result in the contractor's forfeiting his right for the following especially if the cause of delay is also a breach of contract by the owner³ or the architect is aware of the delay⁴. This fact follows from the general principles of law in respect of acts of prevention which is that a party cannot take advantage of the failure to fulfill by another party when that failure has been caused by that party⁵.

4.3 Recovery of liquidated damages

Section 75 of the Contracts Act provides that:

When a contract has been broken, if a sum is named in the contract as the amount to be paid in case of such breach, or if the contract contains any other stipulation by way of penalty, the party complaining of the breach is entitled, whether actual damage or loss is proved to have been caused thereby, to receive from the party who has broken the contract reasonable compensation not exceeding the amount so named or, as the case may be, the penalty stipulated for.

It therefore follows as stipulated in all standard forms that in the event that the contractor fails to complete the contract works by the stated date for completion (or by a date extended under the contract), then the owner is entitled to recover liquidated at the stipulated rate. This will apply also in respect of sectional completions such as is for example recognized in Clause 41 of the IEM Conditions and Clause 21.2 of the PAM Conditions. Sectional completions will apply when for example an owner engages a specialist contractor directly to install major equipment to its factory rather than as a nominated sub-contractor and requires to have access to the area in advance of the rest of the building so that by the time that the whole building is complete, then the plant which probably forms an essential part of the factory is operable. It is also quite common to have more than one sectional completions.

It is also common to include in construction contracts provisions for takeover by the owner, after obtaining the consent of the contractor of parts of the site before the whole of the works has reached practical completion as has indeed been provided in Clause 42 of the IEM Conditions. In such a case, the liquidated in respect of the

³ See *London Borough of Merton v Leach (Stanley Hugh)* [1985] 32 BLR 51

⁴ Ibid

⁵ See *Barque Quilpé Ltd v Browne* [1904] 2 KB 264

whole project will be reduced in proportion to the value of the relevant part compared to the value of the whole of the works.

In both cases of sectional completion and takeover of a part of the works, there will be provisions in respect of the commencement and expiry of the defects liability and release of retention in respect of the relevant section or part.

Please note that it is quite common in “process engineering” contracts to allow the recovery of liquidated damages for failure to meet capacity requirements on top of time limits. Thus for an oil refinery project, upon the contractor achieving a certain margin respect of the targeted capacity of the plant, liquidated damages in respect of time for completion will stop to run and the contractor will be given time to try to achieve a higher production capacity but if at the end of the period (or upon the contractor deciding to give up before then) the contractor still is unable to achieve the targeted capacity, the owner will be entitled to recover liquidated damages for the shortfall.

4.4 Performance security

Because of the very long delivery period and the often complex nature of construction works, a lot of things can go wrong during the construction resulting in failure by the contractor to deliver in accordance with its contractual obligation. Such failure can be in respect of time for completion, defects, total failure of the works (such as major structural failure), failure to meet capacity, or the contractor being totally unable to complete. In the last instance the owner has to employ another contractor incurring substantial delay and additional cost.

In such an event, it is possible or even likely that the retention (often of 5% of the contract sum) will be inadequate to compensate

We will examine below the two broad categories of instances when an owner needs additional security in the form of a guarantee provided by a 3rd party (often but not necessarily a bank):

4.4.1 *Employer needs to engage another contractor to takeover the works – when contractor absconds or runs into financial difficulties*

This involves the contractor not only in having to incur higher cost in awarding another contract at a higher contract sum, but also in additional consultancy fees, delayed completion with its attendant loss of revenue (this would have been quantified as the LAD), and liability to 3rd parties such as happens in the case of the employer being a developer.

4.4.2 *Major failure of the works*

If construction works faces major failure, the costs incurred may include the following:

Remedial works – the pure engineering cost is more expensive than doing it right in the first place. You will need to excavate, support, conceal from public viewing, etc., etc.

Loss of use – this economic cost can be very high such as when parts of a building has to be shut down.

Damage to 3rd parties – Highland Towers being an example which springs to everyone's minds.

A situation like the Gua Tempurung failure is a good example. The remedial works were very expensive as the earthworks had to be carried out at a location which was half cut / half fill width wise and substantial costs were incurred in the detour. The stretch of the highway had to be closed for about 2 weeks thus incurring substantial loss of revenue. Fortunately, the loss of life was minimal otherwise the 3rd party liability would have been horrendous.

The implication of the above is that the potential liability in the event of default by the contractor is very high, especially in the event of a major defect in the construction. In such a situation the loss can amount to a sizeable proportion of the contract sum in which event the 5% retention plus 5% performance bond (let alone 5% retention only) would not be sufficient to cover the loss, hence the importance of a bond. On the other hand, such major defects are relatively rare, hence the industry has adopted

through practice 5% performance bond in the case of civil and structural works, and 10% in the case of M&E works.

It is not a matter of legal necessity that bonds must be issued by banks and suitably worded corporate / personal guarantees are equally enforceable as they are both governed by the same legal principles. But bear in mind the fact that judgment and satisfaction of judgment are not equal. The author has often in the past accepted corporate guarantees, often from parent companies who are 1st board public listed companies. The benefit to be gained from this is that the premium which would otherwise be payable may be saved and this often translates into a reduction in the contract price for the client or main contractor.

The important point to note in regard to bonds is their wording. Therefore, it is always safest to adhere closely to the wording contained in the form attached to the contract document. The most important type of bonds are “on demand” or “without contestation” bonds which oblige the bondsman (guarantor) to pay within a certain period of being served a demand by the beneficiary.

A standard on demand clause is as follows:

*“Upon the Contractor failing to fulfill any of the conditions requirements stipulations and obligations contained in the Contract as **determined by you in your sole absolute judgment and discretion**, the surety shall forthwith **on demand** made by you in writing and **notwithstanding any objections** by the Contractor pay you such amount or amounts as you shall require not exceeding in aggregate the aforementioned amount of RM [.....] by transfer to an account in your name at such bank in Malaysia as you shall stipulate or in such other manner as shall be acceptable by you”* (emphases added)

The effect of the above is that:

- The bondsman (i.e. the bank) cannot resist any calls for him to pay up. Upon paying the beneficiary (the owner), the bondsman’s recourse is then to recover from the customer (contractor). Whether the bank is legally entitled to recover will depend on whether the demand had been made in accordance with the bond (the procedure is very simple and there is little possibility of mistake).

- Any protests by the contractor is useless.
- The contractor will then try to recover from the owner via an action. But that will be a long story.

The courts are prepared to uphold any action (via an injunction) to resist a call on an “on demand” bond only in the exceptional situation of fraud by the beneficiary. Fraud in this case means that answering the question⁶ “*Have the plaintiffs established that it is seriously arguable that the beneficiary could not honestly have believed in the validity of his demands on the performance bond?*”. The court will therefore not look into whether the contractor has a reasonable chance of succeeding in an action to resist the owner’s claim for damages.

4.5 Exhaustive specifications

In view of the great detail that the need to properly specify particular requirements in respect of items which require to be supplied and installed, it is not uncommon for the requirements to be included in the following documents which comprise a construction contract:

1. The Bills of Quantities or Breakdown of Contract Price;
2. The Particular Specifications;
3. The General Specifications; and
4. The Drawings

As quite often happens when information is contained all over the place that there are conflicts and/or ambiguities. In such a situation, there are two ways that a contract can provide for its resolution:

1. Look at the true intention of the parties as expressed by looking at the documents as a whole (both IEM and PAM take this approach); or
2. List an order of priority (see Clause 5.2 of FIDIC 1987 Edn 1992 Reprint)

In all cases (Clause 12.3 PAM Form, Clause 8(a) IEM Form), the contract will provide for the A/E to give an instruction to resolve the conflict as to not do so will be to leave it to the contractor to resolve it and in such a case it is doubtful if the contractor will reflect the owner’s wishes.

⁶ per Lord Ackner in *United Trading Corp v Allied Arab Bank* [1985]

This is important from the point of view of determining whether in carrying out an instruction to resolve conflicts the contractor is entitled to a variation (please note that the variation can be negative, i.e. the A/E may give an instruction to follow the less stringent requirement).

If the contract provides that any document is to have priority over another document, effect must be given to it even if by doing so, injustice is done thereby⁷. The worst case of this is seen in conditions which accord superiority to the general conditions as has indeed been done in the case of FIDIC 1987 Edn 1992 Reprint. The better approach is to leave the true intent of the parties to be construed in which case then “one off” or specially prepared documents shall take precedence over general documents⁸. As such the Bills of Quantities will take precedence over the Specifications and definitely over the Conditions of Contract.

4.6 Insurances

Insurance is a necessary part of all commercial transactions in which the client makes a payment, either partially or in full before taking delivery of the goods or the end product.

In the case of construction contracts proper insurance is vital and in this regard it is noted that Clause 33(a) of the IEM Conditions requires the contractor shall as a condition precedent to his commencing works at site effect and maintain the required insurances. How wise! In fact many experienced contracts administrators will independently of whether the conditions of contract or letters of award insist upon the production of the cover notes before commencement of works at site. Again, very wise!!

Some basic points on insurance practice / insurance law:

- A contract of insurance is a contract of ‘*utmost good faith*’. In other words, all material facts must be disclosed, regardless of whether the information is asked for or not. If a fact is omitted in answer to a question, eventhough the omitted fact in no way led to a damage and hence a claim, the insurer will be likely to succeed in avoiding the claim. For example in a case involving a claim for payment out of

⁷ See *English Industrial Estates Corp v George Wimpey & Co Ltd* [1973] 1 Lloyd’s Rep 118

⁸ *Sutro v Heilbut Symons* [1917] 2 K.B. 248 at p. 361

a life insurance policy with the claim having no bearing with the fact that the woman had previously had a Caesarean section, the insurer managed to avoid the claim on the basis that in answer to a question on whether she had previously undergone an operation, she had declared “No.”. [See *Kumar v Life Insurance Corpn of India*, [1974] Lloyd’s Rep. 147]. Thus, when a contractor is securing insurance for a project, it is advisable to ensure that the insurer and his broker is given the opportunity to inspect the contract documents when an application for insurance is made and to have this fact recorded, i.e. by means of a letter confirming the fact that a set of relevant drawings, BQ, contract scope of works, etc has been made available. Whether the insurer actually bothers to inspect the documents is another matter.

- There is no advantage to be gained by insuring an interest twice (life, personal accident insurance is different) as contracts of insurance are contracts of indemnity and you cannot indemnify against a risk twice. The total sum claimable in such a situation would be the amount of the loss.
- The insurer has a right of subrogation, i.e. he has the right to step into the shoes of the insured after he has indemnified the insured and can pursue an action against the party who caused any loss. For example, if a contractor’s hired crane collapses on a building and causes heavy damage, the insurer may after paying the employer for the loss, take an action against the hirer using the name of the employer. The damages recovered by the insurer will go to the insurer. Thus when there is a 3rd party claim, it is always best to let the loss adjuster negotiate the compensation payable.
- Take note of such limits on claims such as the maximum claimable per incident, excess clause, and number of incidents for which claims may be made. It is possible to have the limits reduced for additional premium.

4.6.1 Damage to the Works, damage to 3rd Parties

The practice in the construction industry now is to accept construction all risks (CAR) policies which cover both damage to the works as well as 3rd Party liability. CAR policies cover all damage suffered in the course of construction except for risks which are excluded. Risks normally excluded are:

- Any failure in any portion of the Works due to a defect in the Works itself. Therefore, if a column fails and collapses due to defective workmanship, the damage to column itself is not covered, but collapse experienced by other parts of the building as a result of loss of support is covered
- Economic loss. Thus for example if a generator forming part of a building still in the process of construction is damaged say by fire, the cost of repair or replacement is claimable, but the cost of hiring another generator in the meantime is not. Accordingly, liquidated damages is not claimable, i.e. the contractor cannot claim for LAD suffered, and the employer cannot claim for the LAD which he is deprived from recovering. Note that specialised policies are available to cover such situations. An example would be advanced loss of profit insurance which covers an owner against the loss of revenue he is likely to suffer if there is a delay in completion.
- Willful acts or willful negligence. An example of the latter is proceeding with excavation works being well aware of the existence of underground services without piloting being carried out.
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In the event of the occurrence of an excepted risk, the insured will have to bear the amount of the claim himself.

3rd Party liability is the damage suffered by an upstream landowner when a drain is choked by construction debris and the drain overflows. 3rd party damage is potentially enormous like when a spanner drops from a bridge constructed over a highway and it hits a 30 year old brain surgeon, killing him. Another example will be a crane collapsing on a neighbouring building.

4.6.1 *Injury to workmen*

All employers are required by s26 of Workmen's Compensation Act 1952 to take up Workmen's Compensation Insurance for his workmen. Failure to comply with this will render an employer liable to fine or imprisonment or both.

All employers with workmen earning less than RM 2,000 p.m. are required under the Employees' Social Security Act 1969 to make contributions on behalf of their workers.

There is now also legislation requiring separate policies for foreign workers.

In the event of injury involving negligence by an employer, whatever compensation ordered to be paid by a court or industrial tribunal will be paid less the compensation paid under Workmen's Compensation, SOCSO or Foreign Workers' Insurance.

4.7 Progress payments

Progress payments are effected normally on a monthly basis based on measurements carried out between the A/E's representative (normally from the consultant QS firm) and the contractor. In the case of remeasurable contracts, i.e. Bills of Quantities based it will involve the conduct of actual site measurements. However, in the case of Lump Sum contracts, it is quite often the case that the parties will assess the percentage progress of the various elements comprising the contract sum.

Some important points on progress payments are as follows:

- Retention at 10% of the gross amount of each progress evaluation will be deducted until the retention reaches 5% of the contract sum;
- There is normally a minimum value of work and material supplied before the 1st progress payment certificate is issued and minimum value of each progress claim(Clause 47(a) IEM Form);
- Half of the retention (called 1st moiety) will be released after the certificate of practical completion is issued and the second half (called 2nd moiety) is released after the certificate of making good defects is issued;
- A period for the honouring of certificates from the date of certification is stipulated (Clause 47(b) of IEM Form and Clause 11 of the PAM Form);
- Failure by the owner to pay within the stipulated duration does not automatically entitle the contractor to terminate his employment. Instead it is necessary to see whether the owner by its conduct in delaying payment “amounts to an abandonment of the contract or a refusal to perform it on the part of the person making default”⁹. Therefore a contractor is advised to not rush to determine his employment on the occurrence of delays of about one week each on two consecutive payments. Something radically more than this is required.

4.8 Right of determination of contractor’s employment

The right under contract does not exclude the parties’ common law remedy. Thus for example the right of a contractor to terminate on grounds of insolvency does not preclude the right to terminate upon consistent and serious breaches of payment obligation (see 3.7).

This is normally provided in construction contracts for the following reasons:

1. It gives recourse to the innocent party before a bad situation gets worse; and
2. To secure for the owner more extensive rights than he would normally have at law. This would include for example a right to take over materials brought to the site but for which payment has not been made or certified for payment and the right to take over plant and equipment belonging to the contractor.

⁹ See *Freeth v Burr* [1874] LR 9 CP 208

5. Common pitfalls and problems

5.1 Delays

This is often the most problematic area for owners and main contractors. This is because causes of delay are rarely clear cut as both parties are usually culpable although often to different extents each and the lawyers will have a field day if there is a determination on this basis (even if the contract contains provision for this – delay is a basis for determination recognized at law¹⁰).

Proper analysis of delay especially on technically complex projects requires input by planners and they are in fact employed full time on such projects. Analysis will be by means of the establishment of a critical path and analyzing the impact of an alleged cause of delay.

In order to establish its right to extension of time the contractor has to maintain detailed and thorough records and give prompt notices of delay.

5.2 Payment delays by owners

This is often an area which causes much headache to contractors due to the current state of the law in Malaysia. This happens when for example a developer's sales are poor. Defaults in payment is not a basis for a contractor to slow down or suspend the works which will be preferred course of action as determination is not a good choice when often millions of RM are in the hands of the owner.

Employers often resort to putting pressure on their contractors indirectly via their architects/engineers by declaring defects when in actual fact there are no defects. In such cases it is very difficult for the contractor to continue his works and will need to slow down his works. The owner then uses this as an excuse to determine the contractor's employment.

The more honest owners acknowledge their inability to pay and request the contractor to take payment by the contra of property and if they are really decent they will give the contractor a discount!

¹⁰ see *Brown v Bateman* (1867) LR 2 CP 272 at 275

5.3 Determining causes of defects

This is another problem area especially when geotechnical works are involved as the cause can as much be due to inherent problems in the original soil, a defect in the specification, a defect in the design, or the contractor not carrying out proper compaction or piling.

The contractor (as is often the case) has clearly the worse of it in this situation as all the design and geotechnical data is with the owner or his consultants. However, arguably the contractor can try to rely on test records to prove that he has discharged his obligations. In such a case and provided that all the test results show that he has done his works properly, the owner will have to prove that the contractor actually caused the defect or failure.

5.4 Independence of A/E is often a fallacy

In the author's quarter of a century in the construction industry he has almost never come across an impartial A/E, and this is in spite of for example the Code of Conduct for Architects (forming a part of the Architects Rules 1996) made by the Board of Architects which states in section 1(6) that an architect shall be impartial in any disputes between the client and the building contractor. The reason for this is found in 4.5 below.

5.5 And remember – the money is in the owner's hands

At the time a project reaches completion, the contractor will have 10% (performance guarantee is as good as cash) of his payments in the owner's hands and in the current weak economic situation, this will often be equal to and more than the contractor's profit margin (except that often the contractor in turn will be holding its subcontractors' payments but not all of it is passed down as there is often no retention for labour and trade subcontractors). At this stage, more often than not variations would not have been finalized (and –ve VOs are more common than +ve ones) and this means more of the contractor's money in his employer's hands.

So, by this time the contractor will often be desperate for money. If there are any major defects discovered at this stage (or defects are concocted) then all of the 10% will be held back until resolution.

As such, the contractor is often at a serious disadvantage when he is in a dispute situation with his employer. Defective works is often employers' weapon of choice to get the contractor to agree either to forget all of his final account money or to take a substantial haircut.