

Issue No : 13
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Article No : 1
Author : Roger Trett
Title : Introduction - Out of Recession

Out Of Recession

There is no doubt about it, the 'green shoots' we were told about a couple of years ago are really visible. There are unmistakable signs that economic recovery is with us at last.

That this is so is evidenced not only in successive statements and assurances from various government departments (we've seen those before, haven't we), but in the attitudes, orders and optimism which stem not just from the glorious summer weather (which undoubtedly helps) but from the grass roots of our common experience - a much more reliable guide. We know things are getting better because we can see it and feel it around us. And optimism breeds success. Enthusiasm generated by the brighter outlook feeds and accelerates the recovery of itself, and again that is apparent from our own experience.

The Construction Industry has probably felt the recession more severely than most. Orders slumped, huge numbers of site employees were laid off, staff were cut back. Some big names went for ever, others amalgamated; some diversified, others retracted to their core business. The survivors tightened their belts, sought a leaner efficiency ready to respond to the eventual upturn.

Now its come, what has the industry learned? Has any benefit been salvaged from the disaster? Will things be different next time? Has the recession had any effect upon you, personally, in your professional life? There is no doubt things were snowballing almost out of control at the end of the 80's. The demand for construction at that time diluted management and allowed it to slacken in many cases . The pressure to complete, driven by the financial climate, overrode common sense and proper contractual behaviour. The prevalent moral climate encouraged, or at least emphasised, short term gain at the expense of long term benefit, a sure recipe for deteriorating relationships.

So, when the dust settled and the euphoria evaporated, a lot of pieces were left lying about and the attempts which were made to maximise recovery of sums due, but side-lined in the glut, together with the shedding of surplus staff, inevitably brought an increased awareness of the enormous burden of disputes borne and sustained by the industry. As long as the mix was being poured in, apportioning the cake was easy. When the pouring stopped, and the size of the cake was fixed, apportionment became more critical and more contentious.

Sir Michael Latham, reflecting the growing concern, has recently issued his report on the industry, and remedial proposals are under review. Legislation is being pursued to ease the payment process down the line to sub-contractors and suppliers. If nothing else, the recession has nudged us through an increasing awareness and concern of and for our problems and towards actual attempts to do something about it. The danger is that the recovery will divert attention once again, and the 'corrective intent' will be still-born. How can we stop that happening? Is there anything we can do, as individuals, to ensure a real, lasting, benefit from the hard learned lessons of the recession, or will the whole cycle repeat itself?

The nature of the industry will only change when personal attitudes change. Whilst legislation may encourage, only individuals can really effect the changes we want. But attitudes are changing now, you can feel it; optimism is re-emerging. Catch the tide and the opportunity, and apply the lessons.

Deal with people fairly, as you would be treated; seek concord rather than discord in discussion and negotiation; listen to and understand the other fellows view; look beyond tomorrow. A major proportion of the disputes that we see could be avoided so simply

The attitudes prevalent in the construction industry prior to the recession weren't that effective, were they? I'm sure we can and will do better.

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Author : J Jones
Title : International Experience 4 - Building the Bahamian Way

Building The Bahamian Way

John Jones describes his experiences of Building the Bahamian way.



The Bahamas comprise an archipelago of more than 700 coral islands stretching from within 50 miles of Florida's East coast down to a similar distance from the northern coast of Cuba, ranging in size from the largest island, almost 100 miles long by 20 miles across, to some barely large enough to pitch a tent on.

With average temperatures of 70 degrees Fahrenheit in the winter, 81 degrees in the summer and with beaches of near white sand being lapped by clear turquoise green waters, it is hardly surprising that the Bahamas are a year round tourist destination for people from around the globe.

As tourism is the largest sector of the country's economy, much of the workload of the local construction industry is related to the provision of the facilities required to accommodate the one million visitors that arrive in the Bahamas each year.

Being an archipelago of islands comprising coral rock, there are very few mineral resources available locally and the majority of the consumable items needed by the Construction Industry must be imported.

When importing construction materials, deliveries are very much subject to delays not encountered with locally produced equivalents, such as weather (especially during the hurricane season), shipping strikes, mechanical breakdowns, shipping availability, goods damaged at the docks and increases in the custom duties imposed locally.

In addition, when working on several islands simultaneously with imported materials being shipped to one port of arrival, it can prove difficult to ensure the correct distribution of those materials.

As a consequence individuals employed within the Bahamian Construction Industry are, as a matter of necessity, far more tolerant of delays than their European and North American counterparts.

A particular problem associated with the purchase of materials from overseas companies is how to pay for goods which require significant periods of time from commencement of manufacture to the delivery of the goods at the port of arrival.

The most common means of overcoming these financial problems is to set up credit guaranteed by a reputable bank (ie Letters of Credit), the release of which is triggered by the satisfactory landing of the goods on the docks in the Bahamas. The vast majority of suppliers find Letters of Credit more than satisfactory, against which they are happy to supply goods and services.

From the contractual point of view, the ex-colonial nature of the Bahamas has left a legacy of a British style legal system and for the vast majority of large construction projects, British Standard Forms of Contract or the FIDIC Form provide the basis of the contractual relationships between the parties.

With regards to the resolution of disputes arising from construction projects, the British characteristics of the legal system has led to the incorporation of arbitration clauses within the contracts, although it is very rare that such disputes cannot be resolved by other means.

Upon deciding to initiate an overseas office, any company is faced with several immediate problems such as obtaining credit, awareness of that country's legal system, knowledge of local customs, the conduct of business in a foreign language, work permits, driving licenses for staff etc.

When choosing to undertake projects overseas, such problems can be surmounted if one of the following steps is initiated:

1. Enter into a joint venture with a local contractor - this can provide instant knowledge of the market and provide good business contacts but it is important to choose the right partner.
1. Adopt a local sponsor who can provide the contacts and knowledge required for success without the burden of a commitment to a joint venture partnership. It is important to ensure that the period of such sponsorship is not overly prolonged.
1. Obtain the necessary contacts and knowledge by investigation rather than relying upon a third party or sponsor with an unknown portfolio and/or track record.

The choice of the foregoing will vary with the particular circumstances of the company and the country in which the office is to be opened. For the now defunct Rush and Tompkins BV, for whom I worked in the Bahamas, the appropriate choice was the entry into a joint venture with a Bahamian Company, (an arrangement which proved profitable for all concerned until the unfortunate demise of the Rush and Tompkins Group).

A particular problem of all construction companies based in the Bahamas is that the achievement of economies of scale is extremely difficult in a country where the population, excluding tourists, does not exceed 300,000.

As a consequence, the full time utilisation of specialist plant such as pile drivers and tower cranes is an impossibility and the economic provision of such plant can only be achieved by entering into hire arrangements with companies outside the archipelago.

The overall effect of having to obtain specialist plant via hire arrangements with companies outside the Bahamas is that any construction work requiring such equipment can prove to be very expensive when compared to more traditional methods of construction. This could go a long way in explaining the resistance of the Bahamian Construction Industry to the adoption of the more modern construction techniques.

Working on projects overseas can be professionally and personally rewarding for both the individual and the company and the initiation of the right investigations prior to the commencement of such work can ensure long term prosperity for all concerned.

Building the Bahamian way was an extremely pleasant experience for all of my 3 years in the archipelago and I came back richer, not so much in financial terms, but rather in social and professional terms.

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Author : P McNicholas
Title : Novation of Consultants to Design and Build Contracts

Novation of Consultants to Design & Build Contractors

1. INTRODUCTION

Although the practice is not new, it is becoming more frequent for employers to engage their own consultants to carry out the preliminary design of a project, and then to use a design-build contractor to complete the design. The contractor is often required to accept contractual responsibility not just for the design and construction works he carries out himself, but also for the preliminary design carried out by the employer's consultant.

As a palliative to the contractor, the terms of engagement of the consultant by the employer are novated to the contractor. The advantages of this system to the employer are:

1. He is able to use his own preferred designer to obtain whatever aesthetic or other technical design advantages he believes are to be had, by using a designer who is not also responsible for construction.
2. He can involve the contractor in the design process and obtain the contractor's buildability knowledge at an early stage.
3. He is able to obtain the benefit of the contractor, effectively, guaranteeing the consultant's design. In this regard, the larger design-build contractors will often be able to afford to maintain higher limits of indemnity of professional indemnity insurance than many consultants.

2. THE DESIGN TRAP

A matter which the contractor needs to be particularly careful about is that he should not accept a higher design responsibility to the employer, under the design-build contract, than the consultant has accepted under its terms of engagement by the employer. The contractor is obviously exposed if he agrees a fitness for purpose design obligation in the design-build contract, whilst the consultant, whose terms of engagement are to be novated to the contractor and for whose design the contractor is to be responsible, has only accepted a reasonable skill and care design obligation on its terms of engagement.

3. NOVATION

Novation is an act whereby, with the consent of all parties, a new agreement is substituted for an existing agreement and the latter discharged. Usually a novation takes the form of an introduction of a new party to the agreement and the discharge of one of the parties to the old contract. For example, where "A" is indebted to "B" and "C" is indebted to "A", and all three parties agree that "C" shall become "B's" debtor in place of "A". Three conditions, however, have to be fulfilled to enable "B" to sue "C" upon such an agreement. These are:

1. The intermediate debt of "A" to "B" should be extinguished;
2. The same or a larger amount should be due from "C" to "A", than from "A" to "B"; and
3. A defined and ascertained liability should be transferred.

4. THE EXTINGUISHMENT OF INTERMEDIATE OBLIGATIONS

A feature of many novation agreements currently in use, is that they do not contain terms discharging the consultant from liability to the employer under the terms of engagement, even though the consultant is made liable to the contractor for a breach of the terms of

engagement by the substitution of the contractor for the employer under that agreement. The reason for this omission is to attempt to keep the consultant liable to the employer even after the novation.

Because a novation requires the parties to the 'old' contract to give each other a mutual discharge of liabilities, it is considered that, in certain circumstances, the attempt to keep the consultant on the hook to the employer may actually rebound on the employer.

If, for example, the novation agreement is not executed as a deed (and because of this consideration has to pass from the employer to the consultant), then there will be a total failure of consideration from the employer to the consultant if no discharge is given to him by the employer. The result of this would be that not only would the consultant remain liable to the employer after the novation, but also the employer would still be liable to the consultant, notwithstanding the express words of the novation agreement which states that the employer is no longer liable to him. If, therefore, the contractor failed to pay the consultant's fees after novation has taken place, in the above circumstances the employer would still be obliged to the consultant for the same.

5. IMPLIED NOVATION

Although, on its face, the total failure of consideration referred to above would result in the employer remaining liable to the consultant, post novation, it is possible for a discharge of the consultant to be inferred from conduct, without express words. The courts may look at the three agreements (the terms of engagement, the design-build contract and the novation agreement) all as one composite agreement. If this were to be the case then it is doubted whether the courts would infer that the contractor had accepted liability to the employer for any matters other than design and construction of the building.

This would mean that for non-design obligations contained in the terms of engagement, following either an express or an inferred discharge of liability of the consultant, the employer would have no legal redress against anybody. It would not, however, be possible for the courts to infer a discharge of the consultants liabilities to the employer if one of the three agreements referred to above contained an entire agreement clause' (ie a claim which states that the agreement represents the entire agreement between the parties), because such a clause would prevent the three agreements from being construed as a single composite transaction.

6. NON-DESIGN LIABILITIES

Consultants' terms of engagement do not simply comprise design responsibilities. The typical services to be provided by an architect, for example, include investigating the site, carrying out an initial feasibility study, advising on cost implications of alternative designs and supervising the construction works.

An example of a situation in which the employer may be left without a remedy (where the consultant is either expressly discharged from liability in the novation agreement or such a discharge can be inferred in the way described above), is where a site boundary is not well defined physically on site and the consultant pegs out the boundary incorrectly, so that when the contractor comes to commence building he is prevented from doing so by the adjacent land-owner who objects to the encroachment onto his land. Pegging out the site boundary is neither a design function nor a construction function. Therefore the contractor will have no liability for the same under the terms of the design build contract.

7. CONCLUSION

The purpose of a novation agreement is to substitute a new party for one of the parties to the 'old' agreement without, in any way, altering the terms of the 'old' agreement. Notwithstanding this, it will be seen from the above that, in certain circumstances, one or more of the

employer, the contractor or the consultant, may be worse off, in terms of additional liabilities assumed or remedies lost, after the novation has taken place. Careful drafting of the documentation is necessary to avoid the pitfalls.

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Author : S Briggs
Title : Float - Part II

Float - Part 2

The previous article on the subject of float (see Issue 12 - Spring 1994) addressed the question of the ownership of float and elaborated on the definitions of the various types of float. This article will address firstly the issue of a contractor's entitlement to time followed by the effect of delay on critical and non-critical work.

THE CONTRACTOR'S ENTITLEMENT.

Under most standard forms of contract, unless expressly directed otherwise, the contractor is free to organise his works in whatever way he wishes providing that he proceeds with reasonable diligence and is, at any time, capable of meeting the contract completion date. There is an obligation on the employer to allow the contractor the time to carry out the works. An extended view of this is expressed in the dicta of Vaughan Williams LJ in *Wells v Army & Navy Co-operative Society (1903)* as:

"If in the contract one finds the time limited within which the builder is to do the work, that means, not only that he is to do it within that time, but it means also that he is to have that time within which to do it..."

Although there is an implication in the above that the contractor is entitled to complete the works earlier than the completion date, he does not have a right to do so (and there is no obligation on the employer to facilitate early completion). In programming terms this means that the contractor is at liberty to programme his works so as to achieve early completion i.e. to build 'float' into his programme.

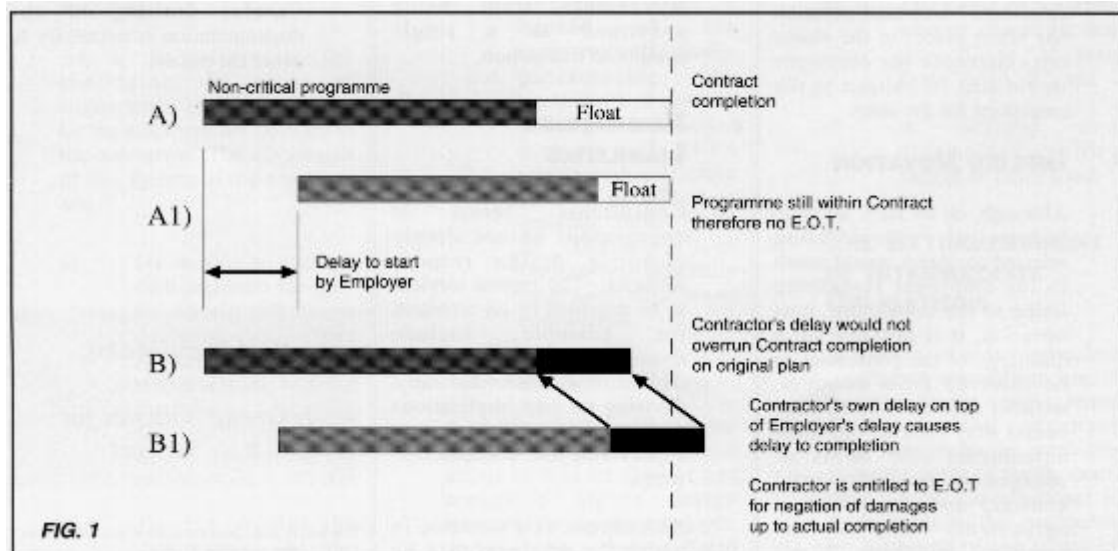
As mentioned in the lead article of the previous Digest, some contractors attempt to do this and, incredible as it may seem, it is in the mistaken belief that, in the event of delay occurring which uses up the project float which they have created (but which does not cause completion to be delayed), they will be entitled to an extension of time.

The fact is that, in such circumstances, not only are they not entitled to an extension, they simply don't need one. An extension of time is only necessary when the completion of the works is delayed or is likely to be delayed beyond the contract completion date and only then if the delay is caused by the employer. In any event, the purpose of an extension of time, to quote Mr. Donald Keating Q.C. who says in his work on Building Contracts 5th Edn. at p233, is:-

"...wholly or partially as a defence to a claim for liquidated damages from the original completion date."

and damages would only be levied by the employer in the event that the contract completion date was not achieved by the contractor.

In the previous issue Roger Trett posed the following question - *"If an employer causes delay to a programme of a duration less than the float on the programme and then the contractor causes further delay in the execution of the works which results in the programme finishing after the contract completion date, is there any entitlement to extension of time. If so, what would the contractor's entitlement be?"*, (see Fig 1).



In these particular circumstances the contractor would, in my opinion, be entitled to an extension of time for the period from contract completion to actual completion (for the purposes of negation of damages) but would not be entitled to reimbursement of associated loss and/or expense.

THE EFFECT OF DELAY

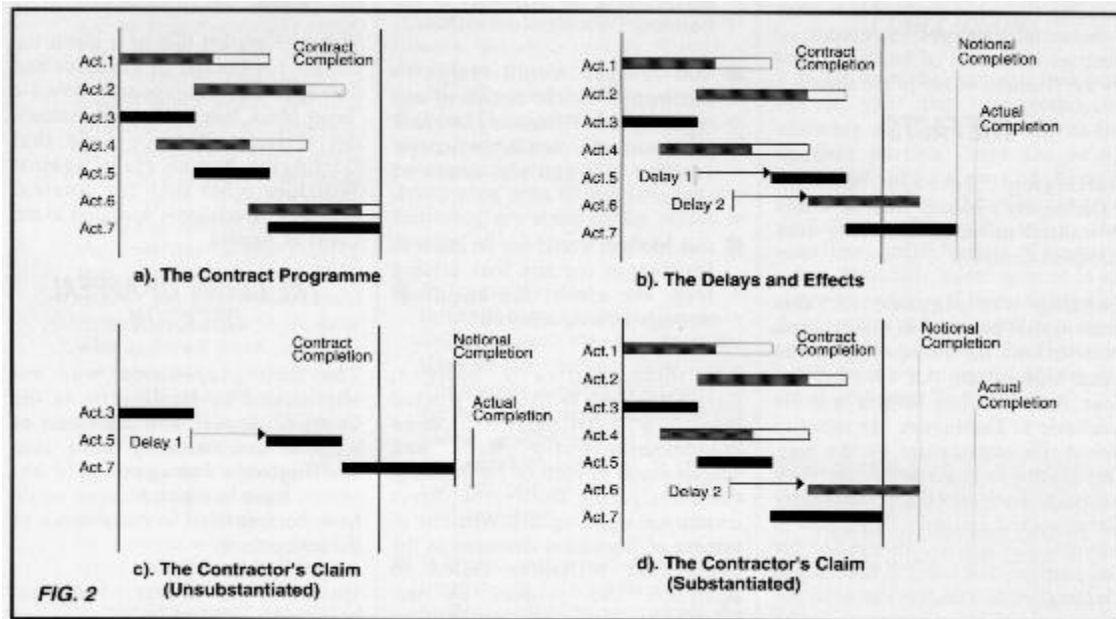
In most construction project programmes there is a 'critical path' which can perhaps be better understood by reference to its original name of 'Longest Irreducible Sequence of Events'. Any delay to an event which is part of that path or sequence will result in delay to the whole and, in such circumstances, a contractor may be entitled to an extension of time provided, of course, that the delay was caused by the employer and that the true criticality of the delayed event can be supported by proper analysis.

In the instance of delay being caused to non-critical events the situation is a little less clear cut. All too often, in claim submissions, we see selective analyses where the claimant has attempted to demonstrate the effect of delay only on the critical path activities by reasoning that delay to non-critical activities does not affect completion if there is also delay to critical activities. What is being ignored is that non-critical activities can become critical if the duration of the delay is greater than the duration of the float. By failing to demonstrate the effects of all delays to activities, whether critical or not, the claimant is risking the complete failure of the claim.

If I may construct a scenario to demonstrate this point; a contractor produces a contract programme (see fig.2a) which has a clearly identified and substantiated critical path. During the course of the works different delays occur to a critical activity and a non-critical activity (fig.2b). The first delay - to the critical activity - is longer than the second but is contentious, e.g. relates to the issue of a drawing which is later proved to be not relevant. The second delay to the non-critical activity is shorter than the first but is still longer than the float on the activity. It is also a stronger argument e.g. denied access.

In the ensuing claim submission (fig.2c.) the contractor builds his case around the delay to the critical activity simply because it is longer and therefore shows completion nearer to the date which was actually achieved. After review the claim is rejected because the contractor is unable to properly substantiate the cause of the claimed delay.

If the contractor had included a complete analysis of all activities and the effect of all claimed delays which can be properly substantiated (fig.2d.) then the claim would stand a much greater chance of success.



I accept that the above is a rather simplistic example of what is often a complex matter. I can assure the reader however, that such situations do occur, surprisingly often, involving claims for huge amounts based on just such an incomplete analysis. The moral of the story is therefore *"if you are going to do it - do it right (and do all of it)!"*.

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Author : C Wilcock
Title : Assignments and 'No Loss' Arguments - The Current Position

ASSIGNMENTS AND 'NO LOSS' ARGUMENTS - THE CURRENT POSITION

BACKGROUND

It is a much-professed rule of the law of contract that a plaintiff can only recover its own losses as damages for breach of contract. Exceptions to this general rule are limited.

However, in July 1993, the House of Lords in the related decisions of *Linden Gardens and St Martin's Property Corporation* allowed an employer under a building contract to recover damages for the losses suffered by a third party.

The Court of Appeal in the recent case of *Darlington Borough Council -v- Wiltshier Northern Limited* has applied the House of Lords decisions with the result that a nominal employer who at no time had ever had a proprietary interest in a building site was permitted to recover substantial damages for breach of contract in respect of losses suffered by the freehold owner of the site.

THE FACTS

Darlington Borough Council ('Darlington') owned land on which it wanted to build a facility (the 'Dolphin Centre').

Funding was required for this construction project, but Government restrictions on borrowing in the Local Government Act 1972 led to a fear that funding would not be available to Darlington. In order to avoid the constraints of the Act, Darlington devised a scheme with Morgan Grenfell (Local Authority Services) Limited ('Morgan'). Morgan was specifically created for this purpose, and acted as financier to Darlington in connection with the construction of the Centre.

Morgan as Employer then entered into two JCT '63 contracts dated 29 October 1979 and 1 December 1981 with Wiltshier as Main Contractor. Clause 17 of the contract forms, which prohibited assignment, was deleted. Morgan entered into these contracts as principal, and not as agent.

Morgan and Darlington entered into a collateral 'Covenant Agreement' on 1 August 1980 and the more important terms of this Agreement were:-

- that Morgan would pay Wiltshier under the building contracts, and Darlington would reimburse Morgan.
- that any warranties by Morgan as to the state of the building, or performance by Wiltshier of the Building Contract, were excluded.
- that Morgan would assign to Darlington "... *the benefit of any rights against [Wiltshier] to which [Morgan] may then be or become entitled...*" and any cause of action.
- that Morgan would not be liable to Darlington for any loss arising from the use of the building, through defects, delay etc.

All three parties - Morgan, Darlington and Wiltshier - entered into a tri-partite deed contemporaneously with and supplemental to each of the building contracts giving Darlington direct contractual rights against Wiltshier in respect of liquidated damages in the event that

Wiltshier failed to complete the project by the Completion Date under the building contracts. No other direct contractual rights were in place between Wiltshier and Darlington.

In 1983/84 defects appeared allegedly due to breaches of the building contracts by Wiltshier. In August 1991 Morgan assigned to Darlington all rights and causes of action against Wiltshier.

In 1992 Darlington issued proceedings against Wiltshier in respect of alleged breaches of contract by Wiltshier.

WILTSHIER'S DEFENCE - THE 'NO LOSS' ARGUMENT

Wiltshier sought to rely upon two propositions of law. These were:

1. that Darlington, as assignee, could recover no more in damages against Wiltshier than Morgan could have recovered had the assignment not taken place, and
2. if the assignment had not taken place, Morgan would not have been entitled to recover substantial damages because it had suffered no loss - the loss occasioned by the defective work was incurred by Darlington who owned the building and paid for remedial works.

Wiltshier argued that as a result the claims for breach of contract and damages had disappeared down a 'legal black hole'. At first instance the Official Referee held that Darlington had no claim against Wiltshier other than for nominal damages. Darlington appealed to the Court of Appeal.

THE COURT OF APPEAL DECISION

The first proposition was not challenged by Darlington in the Court of Appeal, and the Court of Appeal unanimously held that Darlington's damages could not exceed those to which Morgan would have been entitled in the absence of the assignment.

However, the Court of Appeal rejected Wiltshier's second proposition and expressed the following conclusions:

1. A third party cannot sue for damages on a contract to which it is not a party (this is why Darlington required an assignment of Morgan's rights under the building contracts).
2. Subject to certain exceptions, the general principle for the assessment of damages for breach of contract is compensatory i.e. to compensate the plaintiff for its own loss.
3. One exception to this general rule arises in certain situations where it is in the contemplation of both parties at the date of the contract that breach of the contract may cause damage to someone other than the contracting parties themselves.

In *Linden Gardens* the House of Lords had applied the rationale of this exception to the particular situation in that case and said:-

"The contract was for a large development of property which, to the knowledge of both [the Employer] and [the Contractor], was going to be occupied, and possibly purchased by third parties and not by [the Employer] itself. Therefore it could be foreseen that damage caused by a breach would cause loss to a later owner and not merely to the original contracting party ... In such a case, it seems to me proper ... to treat the parties as having entered into the contract on the footing that [the Employer] would be entitled to enforce contractual rights for the benefit of those who suffered from defective performance ... It is truly a case in which the rule provides 'A remedy where no other would be available to a person sustaining loss which

under a rational legal system ought to be compensated by the person who caused it" (per Lord Browne-Wilkinson).

The above passage did not fit precisely the facts in the Darlington case. Morgan had never had a proprietary interest in the property. However, the Court of Appeal thought that it came 'within the rationale' of the House of Lords decision, viz:-

"It was plainly obvious to Wiltshier throughout that the Dolphin Centre was being constructed for the benefit of Darlington on Darlington's land" (per Steyn LJ).

4. Morgan would have been entitled to recover Darlington's loss occasioned by Wiltshier's defective work, and that entitlement had been assigned properly to Darlington.

As an alternative ground for allowing Darlington to recover its loss, two of the three Court of Appeal Judges held that in the light of Morgan's agreement to assign its rights against Wiltshier to Darlington upon request, Morgan could have recovered from Wiltshier the losses of Darlington to whom it stood, in that respect, as a constructive trustee.

THE EFFECTS OF THE DECISION

Although the *Darlington* case and the *Linden Gardens* and *St Martin's* decisions were concerned specifically with building contracts, the decisions would all appear to have relevance to almost all commercial contracts. This is a developing area of the law and the following are some of the points to emerge:-

- It remains the law that a defendant/respondent is only liable for such loss as was at the time of the contract reasonably foreseeable as likely to result from the breach. It now seems that the range of foreseeable (and thus recoverable) loss can in certain circumstances extend to third parties' losses.
- Whereas previously contractors have sought to limit their liability to third parties by prohibiting the right of the employer to assign the contract and/or by refusing to provide collateral warranties, these cases have demonstrated that those steps will not always guarantee immunity from third party claims.
- The plaintiff cannot recover losses sustained by a third party where that third party has its own contractual remedy against the defendant pursuant to a collateral warranty. What is less clear is the right of a plaintiff to recover losses suffered by a third party in circumstances where a collateral warranty has been given but does not permit the third party to recover the loss sustained.
- Despite this, a plaintiff employer cannot recover, as liquidated and ascertained damages under his contract with a defendant contractor, loss sustained by a third party. The deduction of liquidated and ascertained damages will only be permitted where they represent a genuine pre-estimate of the employer's own loss. In the *Darlington* case, it was obvious that Morgan was never going to suffer any loss caused by delay, so by a separate agreement Darlington was given direct contractual rights against Wiltshier in respect of those losses.

CONCLUSION

It seems to be the case, as I indicated above, that the circumstances allowing a plaintiff to recover for another parties' loss are being extended. The Court of Appeal commented in the *Darlington* decision at length upon the sometimes unfair 'privity of contract' rule. That this development is of major importance is demonstrated by the fact that I understand that both parties have petitioned the House of Lords for leave to appeal against the Court of Appeal findings.

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Author : Simon Olimi Kabuzi
Title : International Experience 5 - Tanzania - It's All The Same But Different

TANZANIA - It's All The Same But Different!

I worked on a number of construction projects in Tanzania in 1984 and 1985. Although I visited that delightful country again in 1986 and 1992, I did not go near the projects and I sometimes wonder how they (the projects) are doing now?

A two hour flight at 7am in a five seater plane, travelling south-south west of Dar-es-Salaam (the capital) brought one to an unending cloud line, broken only after 11am to noon. From 8,000ft the pilot had to find a 'hole' in the clouds; he also had to be careful in case the plane was not where his instruments told him that it was - high mountains and all that. Through the clouds one could see the Sao Hill escarpment. Brooke Bond have a tea estate there and in the 1930s, the renegade son of an English aristocrat used to turn up daily for work, as a clerk, wearing tails and plimsolls! But there is also a huge man-made forest to support the Mufindi Pulp Mill Project and Township and it was in the latter that my interests lay.

Funded by the World Bank, the Kuwaiti Fund for International Development and the Government of Tanzania, among others, the Mill project took more than 5 years to design, build and commission! Our job was to build some 650 staff houses, together with water (the quality produced was reputed to be higher than EC Standards!) and electrical reticulation, roads, sewers and (as a good QS would say) "the like". The whole project was staffed by Swedes, Finns, Norwegians, Zambians, Tanzanians, Portuguese, Brits, Indians, Yugoslavs, Greeks, Pakistanis and Malawians (not quite quorate for a sub-committee of the UN!). A few of the men were on married status contracts. Desmond Morris would have made a veritable study of the preening and spreading of peacocks' plumages on Friday and Saturday nights in time for the club. Saturday and Sunday mornings were good for spotting broken noses!

Designed by a famous consulting group, we discovered nevertheless that the specified invert levels were above the highest finished floor levels and what a mess that would have made. The topographical survey of the 300 or so acres, appeared to have been prepared by someone who was being distracted in a bad way by a swarm of mosquitos. The 'topo' was wrong and the whole site had to be re-designed and setout. By us! A claim surveyor's dream became the finance director's nightmare. Luckily, when he woke up, three or four of us were standing beside him, patting him on the forehead, saying, "*there, there now!*" Clauses 44 etc of FIDIC and the money which flowed from them saw to everything!

My next project had its origins as long ago as the 1920s. A wandering European priest (Bible in one hand, gun in someone else's) came across a salty river inhabited by hippos, at a place called Uvinza in Western Tanzania, very close to lake Tanganyika and the port of Kigoma. A commercial salt project was soon established using by-gone technology. During my time, it was run by the State Mining Corporation (STAMICO). The task was to modernise production. A vacuum evaporation plant was designed and we had to build it in a joint venture with an Italian company.

A three hour five-seater plane ride from Dar-es-Salaam to Kigoma, with a stop at Tabora for refuelling. Radio communications had broken down between head office and site and therefore, no-one was there to meet us on arrival. As the crow flies, Uvinza is 30 miles from Kigoma. However, it took us three hours on a road built as an inverted 'V' and strangely, also mapped as one along its length, with a swamp in between.

With a colleague, we hitched up a CB mast one dark night and managed to raise a taxi driver in Brighton. He was very excited at being contacted by two people somewhere between

Burundi, Zaire, Tanzania and Uganda. He tried to phone home (London), to pass on a message to my family but the line was engaged!

Radio communications almost always broke down when we needed a plane back to Dar-es-Salaam. Three of us had to get a train at 10pm on a Thursday at Uvinza and arrived in Dar-es-Salaam on Saturday, at 2pm, 800 miles and 36 hours later. My travelling companions gradually discovered why I was vehement at the start of the journey that scotch, water, bread and corned beef were excellent repast, breakfast, lunch and dinner. By the time we got to our destination, they could neither talk nor laugh. Maybe it was the company.

The site was remote and therefore, staff used to go to Dar-es-Salaam for 'refreshers'. The site manager was a very quietly spoken and strict looking Indian gentleman by the name of Mr Bhang. He came to the Agip Motel where I was resident and one day, I decided to phone and invite him for a drink at the bar. The phone rang; loudly and quickly he said "Bhang!" To which I languidly replied, "To what occasion do I owe this 'explosion'?" He never saw the joke. I know, however, that Mr Bhang saw the job through; to this day, salt is produced at Uvinza and some is exported.

Although I was not responsible for estimating or tendering, I was once asked to be present at the opening of tenders for a housing project; one company out of twenty six. The tenders were due to have been submitted by way of two Bills of Quantities, one wholly in local currency and the second in a mix of currencies. Each of the bills was at least two inches thick, in the usual sealed brown envelope. Twenty five sets were opened but one was missing. Ours. We looked high and low through the mass of envelopes and, at long last, we came across a very thin one, unopened. It was ours. It was on two sheets of paper - it was the lowest bid! But did it conform to the invitation to bid? I was shown the door and I could hear mutterings about the fairness of a game of cricket. Nobody had told me that rather than four inches of paper with words, figures, columns and totals, we had dirt in our pockets! What a set up? I thought of England and Great George Street. The houses were built, but not by us.

The town of Mbeya is close to the border with Zambia and it was here that the Overseas Development Authority of the United Kingdom decided to fund the construction of two magnificently equipped hospitals, one a maternity hospital and the other a referral hospital. Unlike industrial projects there is little chance of under-utilisation of a finished project such as this one. Birth and illness and death are the same the world over, but different!

Everything but everything, except local labour, sand and water was imported for these two projects. As I recall, there was even a point of contention as to who should do the mural on a wall of the entrance; a Tanzanian or a Brit? I think the Brit got it; the cans of paint were imported. Late one day when I was in the Livingstone Hotel, I overheard a protest, in a mix of Swahili and English, that the mural would show a scene from the Shires! Mr Neil Kinnock visited these hospitals in the late 1980s. I wonder what he saw?!