Reply

The notes on amendments issued by the JCT in July 1976 state ". . . . the edition of the relevant Definition of Prime Cost which is to operate is that which is current at the date of tender . . ."

Section 3.1 of the "Definition" provides that "The standard wage rates . . . are those laid down for the time being in the rules . . . of the NJCBI . . . as may be applicable . . . at the time when . . . the daywork is executed."

Daywork is therefore priced at rates current when the work is done (and the appropriate percentage applied as notified in the tender). This takes care of increased costs and is why the NEDO formula excludes daywork.

Insolvency in the Construction Industry

The following is the text of three papers delivered to a meeting of the South Africa Branch at the Wanderers Club, Johannesburg on 6th July 1977.

The speakers were Mr. P. J. Goodson, CA(SA), FCIS, Mr. R. H. Hislop, CA (SA), and Mr. D. O. Norman, MAQS, DipQS (Pretoria), FRICS.

It should be noted that the legal procedures and remedies referred to are subject to South African law.

Insolvency in the Construction Industry

by P. J. Goodson, CA(SA), F.C.I.S.

In order to discuss Insolvency in this Industry, one must first endeavour to obtain a clear picture of the Engineer or the Contractor on whose base the Industry is founded.

Two American authors are of the opinion that mythically a construction contractor is an "illiterate character with muddy boots" blessed by legend with high profits and an affinity for hard drink, but on the other hand cursed by Dunn Bradstreet with low profits and a high failure rate. This sentiment might have in the past been partly correct. Today, however, it must be granted that he is generally an astute entrepreneur, a competent technical man, also a supreme optimist and justly proud of what he achieves.

However, his overriding quality – if that is the word to use – is that at heart he is still a gambler. Because, for every contract he wins by competitive tender there are half a dozen other fellows who are betting that he is wrong and in order to win his bets he must follow the course of all gamblers in that he must take chances to pull off the sought after coup.

Anyone who has read the autobiography of George Pauling, a legendary contractor on this Continent, will agree that the picture I am trying to paint of a somewhat devil-may-care, flamboyant body of business men is not an exaggeration.

We now couple this man to an industry fraught with the vagaries of nature, impossible deadlines, architects and engineers with fixed ideas and hard heads and one is bound to create a fairly explosive corporate structure. One that is either destined to break the bank or doomed to abysmal failure.

It does not matter that today's Construction companies are assisted by all the modern sophisticated management tools and technology available to them, for the ultimate and always telling decisions are generally made on the spot by the man wearing the muddy boots relying sometimes entirely on his "infallible" sixth sense to which he learnedly attached the word "experience".

If decisions of this nature are proved not to be the best ones in the interest of the company they are improved by the sheer dogged hard work not only of the contractor himself but that which he invariably manages to obtain from his men. We have, therefore an Industry that is in no way like any other. In addition to its different activities, it is volatile, erratic and extremely sensitive to other outside influences – political, economic, weather, upsets in other industries. This is true to such an extent that it has often been referred to as a "yardstick" or "barometer" to the whole country's situation in which it operates.

Now the subject in hand – insolvency. The activity of a construction company centres round the contracts it has been able to win or negotiate. It is easy to follow the progression of these contracts through a company. The functions can be listed:

(a) Estimating.
(b) Financing.
(c) Planning.
(d) Execution.

It matters not whether the company is the proud owner of one or fifty contracts, the co-ordinating effort to ensure the dove-tailing of these functions is Management, and here for "management" one must also read "Contractor".

If taken in isolation each one of these functions, if

faulty, will ensure the downfall of the project. It is here that management in all its guises must weld and form them all into a single unit culminating in the profitable finalisation of the undertaking.

I think, therefore, that one can rank the causes of failure as firstly, Unsuccessful Management and thereafter the functions of the contract, as listed. You will note that I use the adjective "unsuccessful" in describing Management as opposed to "Bad", "Incompetent" or a string of others that I am sure you could name.

I say this because no Management team is wholly any of these, for the individual members rely one upon the other for co-operation in their decision making. Even the one-man contractor is swayed by the opinions of others when bringing his sixth sense to bear.

In dealing with the other four functions it is obvious that, for example, if the estimate is 10 per cent below cost no matter how efficient the other three functions may be, they will do little to minimise the inevitable loss. And likewise with the financing, if provision is underestimated it will affect the other two and so on until we are left with the operation on site. Once the first three have been successful the last should have everything going its way. Unfortunately, the man on site is not subject to his own mistakes – he has all the unknown anomalies of the weather to contend with; Labour problems; strikes; incompetence; unwillingness; changes in design; terrain; plant breakdowns; sub-Contractor failure; and it is from this morass that the competent contractor emerges unscarred, on the other hand the reverse can so easily be the result.

It is this fourth function which creates the men of the industry and it is here that progress of a company stands or falls. No matter how perfect the first three efforts may be no matter how conscientious the management overall if it cannot ultimately assist in the problems of the execution of the contract in hand, loss is the only result. A loss which can eventually lead to illiquidity and possible final liquidation.

Insolvency is essentially an inability to pay one's debts when called upon to do so, and it has its beginnings in illiquidity.

This illiquid state is created generally by inadequacy or error in the following:

(a) Contract Loss – arising from default in any or all contracts functions.
(b) Under-capitalization – arising in the main from over-rapid company expansion.
(c) Insufficient Working Capital – this relates basically to (b) but is normally self-inflicted in that it arises from inadequate financial planning.

It is regrettable that with regard to the early warning signs one must liken insolvency in this industry to marriage.

It has been said that in the case of infidelity the other spouse is always the last person to know. It can be said that this be true also of insolvency; when management is eventually convinced of the problem the damage has already been done and a soul-searching reconciliation is required to repair the damage.

I say that Management needs to be "convinced" of a bad situation, because in fact there must have been prior signs which were available which may have been misinterpreted or lightly "written off" to an "unprecedented rainy season" or "an unprofitable contract" or "a contract which was going through an unprofitable period and would obviously recover" and that the set-back was only temporary. All of these observations may in fact have been valid at the time they were made, but nevertheless a prudent contractor would examine them to the *n*th degree, to convince himself that in fact there was no need for concern.

These signs would be readily discernible through some of the conventional accounting procedures i.e.

(a) The Income Statement.
(b) The Source and Application of Funds.
(c) Cash Flow Analysis.

These aids are available to even the smallest contracting firm, but regrettably the optimism of contractors which was mentioned earlier can blind them to these obvious indications.

In a growing or larger business where Job Control or Costing and Contract Cost Projection Systems become critical to the Financial Management, signs of deterioration can be detected at an even earlier stage and remedial action taken.

If for any reason these signs go unnoticed or unresolved the repair work is far-reaching and must of necessity be quickly achieved.

It is unlikely that a contractor (Management) who has allowed a bad situation to develop will be capable of rectifying the situation. It is therefore prudent to seek counsel. I say this not necessarily because of individual incompetence but rectification requires almost a complete reversal of what must have been the current policy and therefore a fresh attitude is needed to achieve success.

It must be ensured that the advice sought be of the highest calibre, and the company must be prepared to implement it. In truth at this stage no other alternative is open except voluntary liquidation.

However, there are numerous possible actions to be taken provided they are taken timeously before an irretrievable situation is reached.

As Insolvency indicates inability to pay one's debts, the remedy must be to generate additional funds. This can be achieved in various ways:

(a) Provided the firm's creditability has not already been adversely affected, one can arrange loan finance.
(b) In the case of larger listed public companies debenture finance or an increase in Share Capital is feasible. But as the motive behind the finance may be questionable the floatation would have to be extremely carefully considered.
(c) Any surplus assets should be sold.
(d) Internal economies should be investigated.
(e) Contract continuation looked into in an endeavour to "sell off" or sub-contract marginal contracts with the idea of releasing plant and personnel to maximise the benefit under (c) and (d).

The Decision to Liquidate

Section 343 and following sections of the Companies Act provides for the different methods of the winding up of a company. The two that we are most concerned with are:

(a) Under an Order of Court on the application of a creditor.
(b) A Members' voluntary winding up.

The interests of creditors in both these circumstances are of paramount importance and in the second instance this fact weights heavily with the decision to liquidate.

It is worth noting at this stage that whilst a contracting company has current uncompleted contracts outstanding it is almost impossible to advocate winding up proceedings, because notwithstanding the fact that a liquidator has certain powers of continuation of contracts, unless finance is available he is unable to implement these powers. It is, therefore, preferable in the circumstances to endeavour to arrange a Judicial Management, however, again the question of finance raises its head. Creditors are, however, more likely to support a Judicial Management situation if eventually their outstandings have greater protection. There is also the incentive of continued supply which they might otherwise forego.

The Duties of the Directors under a winding up order are clearly set out in the Companies Act under section 363 in the case of voluntary winding up and they have a duty under 414 to attend creditors' meetings etc.

These are all statutory obligations. The overriding responsibility is to preserve the assets of the company for the benefit of creditors until control is vested in the duly appointed Judicial Manager or Liquidator.

In the depressed economic situation in which we find ourselves in this country at present, a Liquidator or Judicial Management can almost be regarded as *force majeure* and the failure of the large number of companies, not only in the Construction Industry and the subsequent disruption, unemployment and wasted cost must be regarded as disastrous at this tenuous time in the political history of our country.

Bankruptcy and its consequences

by R. H. Hislop, CA(SA)

Causes

This is the subject of the previous speaker and has been well canvassed. Be it sufficient for me to merely summarise the factors:

- Incorrect capital structure.
- Over-extending the resources of the company.
- Poor management, coupled with inaccurate or improper financial reporting.
- Illegal transactions.

Consequences

The first objective must be an attempt to resuscitate the business and this is achieved by a Judicial Management Order, Provisional in the first instance and if expedient, a Final order is obtained.

The second alternative is Liquidation again following the pattern of a Provisional order and thereafter a Final order.

Rectification

There can be no doubt that an economy is best served by the survival of its business units. Here I should say that it is not purely in the interest of creditors that one embarks upon a rescue operation through the medium of Judicial Management; there is the necessary protection of the employees. This is particularly important to the Civil Engineering and General Contracting Industries which are very much involved in the "people" business.

Companies are placed under Judicial Management by the Courts where:

- They are unable to pay their debts or are probably unable to meet their obligations, and
- They have not become or have been prevented from becoming successful concerns, and there is a reasonable probability that if they are placed under Judicial Management they will be able to pay their debts and meet their obligations.

When a Provisional Judicial Management Order is granted:

- The company is placed under the management, subject to the supervision of the Court, of a provisional judicial manager appointed by the Master of the Supreme Court.
- Any other person vested with the management of the company shall from the date of the order be divested thereof.
- It generally gives the provisional judicial manager the power, subject to the rights of the creditors, to raise money in any way without the authority of the shareholders as the Court may consider necessary.
- It generally contains directives that while the company is under judicial management, all actions, proceedings, the execution of all writs, summonses and all other processes against the company be stayed and not proceeded with without the leave of the Court.

Duties of a Provisional Judicial Manager

To assume the management of the company and to recover all of the assets.

To prepare and lay before a meeting convened by the Master a report containing:

- An account of the general state of the affairs of the company.
- A statement as to the reasons why a company is unable to pay its debts or meet its obligations.
- A statement of the assets and liabilities of the company.
- A complete list of the creditors of the company.
- Particulars as to the source or sources from which money is to be raised.
- The considered opinion of the provisional judicial manager as to the prospects of the company becoming a successful concern.

The Role of Creditors

Here there seems to be a great deal of ignorance particularly in relation to the changes brought about by the introduction of the 1973 Companies Act.

This Act introduced a Statutory Meeting of Creditors under Section 431 at which the Master or a Magistrate presides, and the purpose of the meeting is:

- To consider the report of the provisional judicial manager and the desirability or otherwise of placing the company under judicial management taking into account the prospects of the company becoming a

successful concern.

To nominate the person or persons whose names are then submitted to the Master for appointment as final judicial manager or managers.

The proving of claims against the company.

The Master then submits a report to the Court, particularly the conclusions of the creditors with regard to the placing of the company under Judicial Management.

Return Day

This enables the Court to make the final order after consideration of:

the opinion and wishes of creditors and members;

the report of the provisional judicial manager;

the number of creditors who did not prove their claims and the amount and nature of their claims;

the report of the Master;

the report of the Registrar of Companies.

The Court will grant a final order if it appears that the company *will* be able to become a successful concern. Thus it can be seen that there is a great distinction between the concept of *reasonable probability* and *will become* as reflected in the provisional order and the final order.

Duties of Final Judicial Manager

Take over from provisional judicial manager and assume the management of the company.

Conduct the management, subject to the orders of the Court, in whichever manner he believes to be in the best interest of creditors and members.

Comply with any specific directives laid down by the Court in making the final order.

Keep proper books.

Convene the annual general meeting.

Convene meetings of creditors within six months of year end.

Conduct an investigation into affairs of the company and of its directors and officers over previous six months.

If future of company is in jeopardy then judicial manager must petition Court for a Liquidation order.

Disposal of Assets

A Judicial Manager shall not without the leave of the Court sell or otherwise dispose of any of the Company's assets, save in the ordinary course of business.

Pre-Judicial Management Creditors may consent to Preference

The judicial manager or provisional judicial manager may convene a meeting of pre-judicial management creditors in order to resolve that all liabilities incurred or to be incurred by the judicial manager or provisional judicial manager in the conduct of the company's business shall be paid in preference to all other liabilities not already discharged exclusive of the costs of judicial management.

If a judicial management order is superseded by a liquidation order the preference conferred by section 435 shall remain in force except in so far as claims arising out of the costs of winding up are concerned.

Auditors remain appointed.

Judicial manager applies to Court for cancellation of Order.

Ingredients for Success

In order to succeed a judicial management requires:

That the company must produce something which is in demand whether by way of goods or services.

There are sufficiently competent technical personnel who are prepared to remain with the company and accept the challenge.

The displaced management must throw their shoulders to the wheel and set an example.

The Judicial Manager must have faith in the business, win the co-operation of the staff and be determined to see the matter through no matter how long the task is likely to take.

Liquidation

I now turn to the main subject of the discussion group and propose to deal less formally with the subject than I have done with Judicial Management. I have taken this approach on the assumption that whilst most people know only a little about Liquidation they are totally unaware of the impact of Judicial Management.

Liquidation, as the name suggests, is a destructive process. It follows the section of the Companies Act dealing with Winding Up Chapter XIV – Section 337 to 426. Almost one hundred sections of an Act, which also refers to the Insolvency Act for much further elaboration, speaks for itself; it is a complete subject on its own.

Types of Winding Up

Winding up by:

the Company;

one or more of its creditors;

one or more of its members;

jointly by any or all of the parties mentioned above;

when a company is being wound up voluntarily by the Master or any creditor or member of that company.

It follows therefore that there are two basic types of winding up procedures:

Voluntary winding up, which is further classified between

Members voluntary winding up, and

Creditors voluntary winding up, and

Winding up by Order of Court.

Effects of Winding Up

Voluntary winding up allows a company to remain a corporate body and retain its powers as such; however, it requires to cease trading except in so far as may be required for the beneficial winding up thereof.

All the powers of the directors cease except as far as their continuance is sanctioned by:

the liquidator or the creditors in a creditors' voluntary winding up;

the liquidator or the company in general meeting in a members' voluntary winding up.

In the case of a winding up by Order of Court the custody of and control over the company vests in the Master until such time as he has approved the appointment of a provisional liquidator.

All legal proceedings are suspended and attachments become void.

Effect on Directors

Directors are required to submit to the Master within 14 days a statement of the affairs of the company. This applies to such persons who were directors or officers at any time within one year of the Order, as may be required by the Master.

Directors and officers are required to attend the first and second meetings of creditors. They can be examined under oath at such meetings and they are not entitled to refuse to answer any questions on the grounds that the answer would tend to incriminate them.

The Court itself may summon and examine under oath any director or officer of the company or person known or suspected to have in his possession any property of the company or believed to be indebted to the company or any person whom the Court deems capable of giving information concerning the trade, dealings, property or affairs of the company.

Examination of directors and officers is generally carried out by Commissioners, be they Magistrates or other persons appointed by the Court.

Where in the course of winding up it has become apparent that any director or officer has misapplied or retained or become liable or accountable for any money or property of the company or has been guilty of any breach of faith or trust in relation to the company, the Court may at the request of the Master, liquidator, any creditors or member or contributory, order an investigation which could result in the directors or officers having to repay or restore the money or property to the company.

Meetings of Creditors and Members

The Master summons the first meeting of creditors and members in order to:

Consider the statement of affairs lodged by the directors.

Receive proof of claims against the company.

Nominate a person or persons for appointment as liquidator or liquidators.

Appointment of Liquidator

The Master appoints the liquidator or liquidators.

Powers of Liquidators

To execute all deeds, receipts and other documents.

To prove a claim in the estate of any debtor.

To draw, accept, make and endorse any bills of exchange.

To summon general meetings of the company or creditors of the company.

To take such measures for the protection of the property of the company liquidators in a winding up by Court shall in the administration of the assets of the company have regard to the directives given by resolution of the creditors, members or contributors.

Furthermore a liquidator shall subject to the proviso above have powers to:

bring or defend any action;

agree to any offers of compromise;

submit matters to arbitration;

carry on or discontinue any part of the business so far as may be necessary for the beneficial winding up thereof;

exercise the powers conferred upon him by the Insolvency Act, to which I shall refer later;

sell movable and immovable property by public auction, public tender or private contract.

The Master may and does restrict the powers of Provisional Liquidators.

Insolvency Act

Now we are entering into the main course of the meal for it is in this little known Act that a great deal of anguish is contained. The application of the proceeds of the Estate are paid over in the following sequence:

Costs of liquidation including the Master's fees.

Any costs of execution.

Contributions under Workmen's Compensation Act and any contributions due to any pension, sick, medical, unemployment, holiday or provident fund.

Salaries or wages of former employees limited as a preferent claim to R400 for a period not exceeding two months prior to the date of sequestration.

Leave pay or accrued bonuses are limited as a preferent claim to R200.

Any arrear taxes.

Any claims proved under a general notarial bond.

Non preferent or unsecured claims.

Further Complications

Dispositions without value may be set aside by the Court where these were made within two years of sequestration:

Where the person to whom the disposition was made cannot prove that at the time the assets exceeded the liabilities.

For more than two years where the Liquidator can prove that at the time of the disposition the liabilities exceeded the assets.

Voidable preferences exist in respect of dispositions of property not more than six months before the Winding Up order where it can be proved that at the time the liabilities exceeded the assets.

Undue preferences exist where the company made dispositions of its property at the time when its liabilities exceeded its assets.

Collusive dealings before liquidation. We saw earlier in these papers that the Companies Act makes provision for the delinquent directors or officers to make good the deficit.

Effect of Winding Up upon a lease

Leases do not terminate upon the granting of an Order for Winding Up.

The liquidator is liable to honour the costs incurred in keeping the leases active.

If the liquidator does not notify the lessor, within three months of his appointment, of his intention to continue the lease it shall be deemed to have been cancelled.

Contracts of Service are terminated by a Winding Up Order

This has disastrous effects on contracted employees as we have already seen in respect of:

Unpaid salaries.

Accrued leave pay.

Accrued bonuses.

Any repatriation obligations.

Conclusion

There are some matters which I believe will be of particular interest:

Under the General Conditions of Contract there is a clause 55 which deals with the Property in Materials and Plant.

Paragraph 2 to this clause refers to "Constructional Plant and materials owned by the contractor when brought onto the site is immediately deemed to become the property of the employer".

This clause has been taken from the English Conditions of Contract, I understand, and whilst it has a substance in English Law it is not enforceable in South African Law unless there is clear evidence that the employer exercised his rights by taking delivery of the Constructional Plant and Materials owned by the Contractor.

As a consequence unless delivery can be proved the employer is not at liberty to sell or dispose of the assets except in terms of the Insolvency Act.

In the event of a contribution by creditors the petitioning creditor, whether or not he has proved a claim shall be liable to contribute as if he had proved the claim stated in the petition.

For desserts we have the ability to resuscitate the company by means of a compromise offer which embodies sections 311 and 312 of the Companies Act.

This initial section allows for rescue proposals to be put forward by any interested parties. In order to be successful the offer requires:

a majority in number representing three-fourths in value of the creditors or class of creditors; or a majority representing three-fourths of the votes exercisable by the members or class of members.

If the compromise is designed to reinstate a company presently under liquidation without resorting to winding up then the liquidator shall lodge with the Master a report relating to any contraventions or offences of directors and officers or suspected contraventions or offences and any such grounds for his views.

In addition the liquidator must report to the Master whether or not any director or officer or past director or officer of the company is or appears to be personally liable for damages or compensation to the company for any debts or obligations of the company, and the Master shall report thereon to the Court.

A compromise arrangement can be made at any time prior to the delisting of the company.

This is almost always the best course of action as it provides for a much more acceptable pay out timetable to creditors than the laborious accounting which results from liquidation.

The Quantity Surveyor's role

by D. O. Norman, MAQS, DipQS(Pretoria), FRICS

Introduction

The two previous papers have given authoritative resumés of the circumstances leading to insolvency and the procedures to be implemented in the event of such a contingency. It now falls to me to discuss some aspects of the quantity surveyor's role in relation to insolvency of the building contractor.

Firstly, I shall consider the question against the background of the Standard Form of Building Contract used in the Private Sector, although I have little doubt that the relevant provisions of other forms would be similar.

Secondly, I should explain that I use the word "insolvency" as a general term as does the Standard Form of Contract in the heading to clause 22(b), although in law "insolvency" applies more properly to a natural person, and "liquidation" to a juristic person or company. In fact, in terms of the Companies Act, the law relating to insolvent estates is applicable to companies except in certain specific instances.

Thirdly, it must be realized that in the limited space available, no more than a brief and perhaps, superficial look at the most important aspects is possible.

Early Warning Signs

There are certain fairly unmistakable signs of impending insolvency of which the alert quantity surveyor should become aware.

The first intimation that all is not financially well is likely to be via the "grapevine telegraph". Usually this emanates from merchants who experience a sudden increased reluctance on the part of the Contractor to part with a cheque, from colleagues who are already aware of difficulties on other contracts or, most usually, from general talk among the building fraternity. As everyone knows, some of this turns out to be "just talk", but seldom is the old adage "there's no smoke without fire" truer than in the building contracting industry.

A more direct manifestation of the Contractor's illiquidity takes the form of complaints from sub-contractors, both nominated and others, regarding non-payment of their accounts. Of course, one has to be careful not to give information concerning amounts included in certificates for work carried out by non-nominated sub-contractors without the authority of the contractor, but there are many cases where the quantity surveyor, with the knowledge of the contractor, and at his request, has been working directly with the sub-contractor in establishing interim payment valuations.

A third sign which is seldom absent is a marked slow-down in the rate of progress with the consequence that interim payment certificates will fall behind the target figures on the schedule of estimated expenditure. This results from the difficulty of acquiring both labour and materials arising from lack of liquid funds needed for the day-to-day financing of the work.

Fourthly, the pressure from the contractor to maximise valuations for certificates is likely to increase in indirect proportion to the activity on the building site.

Reaction of the Quantity Surveyor

In theory, I suppose, the answer to the question "how should the quantity surveyor react to the early warning signs?" ought to be "not at all", because any increased care on the part of a suspicious quantity surveyor implies that under normal circumstances he does his job less

than thoroughly. In practice, of course, this is not true, since any quantity surveyor suspecting trouble will take additional care to ensure that the valuations for interim certificates are as accurate as practically possible. The contract does not envisage that such valuations should be any more than, in the words of clause 25(2), "a reasonable estimate", but a considerably greater onus than this rests with the quantity surveyor under pressure of threatened financial failure if he is to serve to the full, the best interests of client and contractor.

I should like straight away to say something about the general question of the quantity surveyor's impartiality. The code of professional conduct to which a quantity surveyor is bound demands that "he shall not act unfairly against the interests of any party to a building contract". In fact, a claim to act within the concept of professionalism implies that one applies one's mind to a problem impartially. However, it is a first duty of the quantity surveyor that his client's (i.e. the employer's) interest must be protected, particularly in the case of default. This is in the very nature of his relationship with his client who has employed him for this very purpose. The contractor on the other hand, while very often (but not always!) relying quite heavily on the work produced by the quantity surveyor, would certainly seek protection of his interests by other professional advisers, were any question of insolvency to arise.

Having said that, it is necessary to emphasize that "keeping the contractor short" on his interim certificates is not serving anyone's interests. In fact, one must recognize that the best interests of all will be served by the successful completion of the contract, and anything that can be done within the terms of the contract to achieve that end should be done. This means that suspected extra on the foundations which could have been valued before but wasn't (the "I'll sort that out later" system) must be established and brought into the valuations. In fact, the final account measurements will probably have to be advanced as far as possible and the maximum accuracy brought to bear on the valuations.

There are, however, many inherent dangers in the situation, and very often, when insolvency does occur, the employer is found to be owing the contractor less than the contractual retention sum. Some of the more common reasons for this are:

(a) Overvaluation of the last interim certificate by the acceptance of too great an approximation and lack of the additional care in regard to accuracy to which I have already referred.
This is not necessarily negligence as insolvency sometimes comes as a complete surprise.

(b) Overvaluation of "preliminary and general" by apportionment to certificates on a time basis where the progress has fallen behind programme.

(c) Overvaluation of "preliminary and general" by inclusion of the full amount for insurances, the indemnifying protection of which may be lost to the employer on default.

(d) Inclusion of the value of work found to be defective. The failure to correct defective work is a common symptom of financial difficulty and architects should be more particular about advising the quantity surveyor of the details of any such defective work.

(e) Overvaluation by disregarding post-production activities such as dismantling scaffolding, making good scaffold holes and cleaning up generally.

(f) Overvaluation by the use of an average rate for the main quantities of work. For example, the remaining plasterwork may be all small areas or the remaining pipework may be all short lengths, which cannot be done for the average rate.

(g) Inclusion of the value of loose materials on site which, because of a condition in a sub-contract or a contract of sale, have not become the property of the employer.

The last-mentioned possibility is sufficient by itself to provide the subject matter for an entire paper, so I shall have to let the matter rest there.

Duties of the Quantity Surveyor after Insolvency

The first duty the quantity surveyor will have to undertake will be to assess the situation by making a reasonably accurate estimate of the balance owing to the contractor for work done and materials on site. This will assist the parties involved, particularly sureties, to decide how the contract should best be completed. The first step in doing this is to make an accurate site survey (usually with supporting photographs) of the stage reached in each section of the work and of the materials on site. The next step, although there may be various different legal intricacies, boils down from the employer's point of view to one of two things. Either the contract is completed by the fulfilment of the performance in terms of the contract, or it isn't. If the former course applies, this will mean that sureties (although in modern practice this is something of a rarity) complete the contract on behalf of the contractor or by some rescue operation such as the acceptance by the creditors of an offer to purchase the company, the original contractor or a new contractor on his behalf completes the contract. In this event, it is likely that no further action would be required from the quantity surveyor since the new arrangements will make no difference to the administration of the contract as originally intended. If the second alternative applies, the employment of the contractor is terminated in terms of clause 22(b), and the employer must himself arrange for completion of the work. This involves the quantity surveyor in the preparation of a final account for the work up to the stage reached by the defaulting contractor, and also the production of bills of quantities for the completion contract.

This eventuality is one which no quantity surveyor relishes, and can be done in one of two ways depending on the stage reached in the construction programme. In the early stages it is easier to measure in detail the work completed for the final account the original contract and then to adjust the bills of quantities by deduction of the completed work as measured, to form the bills of quantities for the completion contract. In the later stages of the contract it becomes easier for the work to complete the contract to be measured and the procedure reversed.

The work completed by the original contractor as now established is then adjusted by the value of variations already authorised and a final cost obtained. When the completion contract has been duly completed, and only then, this final cost is used to settle accounts with the insolvent contractor's estate. The amount involved, which could be either in the contractor's favour or in the

employer's favour, is the final value of the contract, had it been completed by the original contractor, less the payments made before determination and less the costs of completing the work including any direct loss or expense incurred by the employer as a result of the default.

The Completion Contract

Now if the employer is faced with the problem of getting the work completed, where does he stand? He has in hand the amount of retention held, although possibly eroded as I have already said. He has, very probably, an amount of money by way of contract guarantee, usually a maximum of 10% of the contract sum. He also faces the near certainty of a costly delay and of the fact that the completion work is likely to cost more than originally envisaged, owing to the effects of inflation and the less attractive proposition which it appears to be in the eyes of contractors.

The work required to complete the contract comprises two types. Firstly, work of an emergency or remedial nature which is not normally separately measurable in a building contract. This may include work to make the site safe, (e.g. shoring up excavation faces where there is danger of collapse) or to protect existing work from damage (e.g. completion of a roof to avoid rain damage) which must be done immediately, and cleaning up and replacing or making good any defective work which is not so urgent. If there is work to be done urgently, this may not be able to wait for the normal tender procedures to be implemented and may best be arranged separately on a schedule of rates or even a daywork basis.

The second type of work in the completion contract is the remaining work to complete the original contract. For this, some form of competitive tender should be used, if only on the grounds of accountability. It must be remembered that any cost additional to what the work would have cost under the original contract comes out of the insolvent estate and the employer has a common law duty, while protecting his own interests, to complete the work as economically as possible and to minimize the damages which he may suffer.

If for no other reason than that of economy, it is important to minimise the delay and the new tender must therefore be obtained as quickly as possible using the original bills of quantities adjusted for the work already completed, as previously mentioned, and with any remedial or finishing of partially completed items added. Any work to be included in the contract which cannot be measured, and for which a daywork basis is envisaged, is covered by a provisional sum. This will involve for a short period a strict control by the site inspection staff to ensure correct recording of time spent on daywork as distinct from measured work.

The Final Account

It will be noted that the expression used in clause 22(b) is "determine the employment of the contractor". The contract itself does not come to an end, and the responsibility of the contractor for due performance remains until completion of the work envisaged. Consequently, it is only when the final account for the completion contract has been prepared that the final stage of the original contract is reached. Note that the final account for the original contract, despite the determination of the employment of the contractor, is a final account for the whole contract as eventually completed based on the original rates. The difference between the amount of this final account and the payments made to the contractor before determination represents the sum held to the contractor's credit, and from which the costs of completing the work must be deducted in order to ascertain the amount due to the insolvent estate or the amount of any claim on the estate.

One point which is worthy of mention here is the right to the use of plant which the employer has in terms of clause 22(c) (i). If the plant is owned by the contractor there is no problem in the implementation of this provision, but if the plant is on hire or has been acquired under a hire purchase agreement, the employer's right is lost. The problem of establishing whether or not the clause is valid where ownership is vested in an internal plant company, even if wholly owned by the contractor, is dependent on complicated legal tests concerning the running and profits of the plant company.

Damages

Clearly, the procedures outlined in this paper take time, mostly expensive professional time. The quantity surveyor particularly is involved in considerable additional work for which he is entitled to payment. These expenses will form part of the employer's direct loss or expense which is claimable from the contractor.

It is significant that the right to determine the employment of the contractor is "without prejudice to any other rights herein contained". This means that the employer still has the right to liquidated damages in terms of clause 19 and the phrase used in clause 22(c) (iv) for establishing the amount of the debt due either to or from the contractor, "the total amount which would have been payable on due completion", indicates that damages should be taken into account.

Nominated Sub-Contractors

It would now be useful to touch on the position of nominated sub-contractors in relation to insolvency. The effect of clause 15(c) is that the employer has the right (but not the obligation) in specific circumstances to pay nominated sub-contractors direct, and to deduct the amounts of such payments from any amount due to the contractor. Insolvency of the contractor, however, invalidates this right, since, except for what is allowed by law, nothing can be done which would give one creditor an advantage to the prejudice of the others, or which would disturb the recognised priorities of the claims against the insolvent estate. This will apply only to such amounts as were due to the sub-contractor before determination. After determination, a clean slate is started and the right to pay direct in similar circumstances, in respect of new debts incurred, can once again be exercised.

The position in regard to insolvency of the nominated sub-contractor himself is one which has only recently been clarified. The principle generally accepted in informed circles is that the right to nominate a particular sub-contractor carries with it the responsibility for the consequences of such nomination. This means that in the case of default, it is the employer's responsibility to nominate another sub-contractor to complete the work and to bear any additional costs so incurred.