

Bumi Geo Engineering Pte Ltd v Civil Tech Pte Ltd  
[2015] SGHC 261

**Case Number** : Suit No 803 of 2013  
**Decision Date** : 12 October 2015  
**Tribunal/Court** : High Court  
**Coram** : Lee Seiu Kin J  
**Counsel Name(s)** : Raj Singh Shergill (Lee Shergill LLP) for the plaintiff; Tan Tian Luh and Lin Zixian (Chancery Law Corporation) for the defendant.  
**Parties** : Bumi Geo Engineering Pte Ltd — Civil Tech Pte Ltd

*Building and Construction Law – Building and construction contracts – Measurement contracts*

*Evidence – Admissibility of evidence – Hearsay*

*Civil Procedure – Pleadings – Objections*

12 October 2015

Judgment reserved.

**Lee Seiu Kin J:**

**Introduction**

1 This is a dispute arising out of payment for work done under a construction sub-contract.

**Background**

2 In early 2010, the defendant appointed the plaintiff as its subcontractor to carry out ground improvement works by jet grout pile (“JGP”) method in the project titled proposed common services tunnel (CST) at Downtown Marina Bay (“the MC01 Project”). The plaintiff was to install JGP columns with pre-set nominal widths at specified treatment depths, and would be paid \$92 for every cubic metre of soil treated.

3 Significantly, this was not the first time the parties had dealt with each other. Prior to the MC01 Project, the parties had worked on a project known as “Proposed Construction of C482 Marina Coastal Expressway Marina South – Section 1” (“the C482 Project”).

4 By way of background, the JGP process is a method of soil treatment involving the mixing of cement grout into soil so that the resultant cemented soil forms a stable mass that can support any structure above it, or form an impermeable layer against water ingress. The process is carried out in the following manner. A surveyor marks out the points at which JGP columns are to be installed. At each point, the JGP machine drills a hole to the required depth using a rod. Water is then injected at very high pressure through the rotating rod. This water pre-cutting erodes a circular area of the soil and this is followed by injection of cement grout. The rod is retracted at a predetermined rate so that a vertical cylinder of cemented soil to the required diameter and depth is left behind. The installation of multiple overlapping columns will eventually produce an entire concrete block of cemented soil. The overlaps between the columns ensure that there are no pockets of untreated soil.

5 The volume of soil treated by the installation of the first JGP column would be the area of the circular cross section of the column multiplied by its length. This is the volume of the whole column, or nominal volume. The volume of the JGP column installed next to this first one will be less than the nominal volume. Once the first JGP column has cured, it will not be displaced by the installation of an adjacent column. Therefore, the volume of soil treated in the second JGP column will be less than the nominal volume to the extent of the overlap of the two circles. Similarly a third column would be reduced by two overlaps, and so on. A further complication arises where a JGP column abuts sheet piles. These form a barrier to the soil treatment and the treatment would not go beyond the sheet piles. A JGP column abutting sheet piles would therefore treat a smaller volume of soil than the nominal volume.

6 The contract between the parties called for payment of \$92 per cubic metre of soil treated. In this suit, the defendant's position was that payment would be based on the actual volume of soil treated and any overlap, whether with a neighbouring JGP column or with sheet piles, would not be counted as otherwise there would be payment for untreated soil. The plaintiff's position was that the overlaps should be rounded to a 10% deduction based on the nominal volumes of all JGP columns installed, and alternatively, that an 18% deduction should be used.

### ***The payment dispute***

7 The contractual works were completed on 24 April 2012. Upon completion, the plaintiff requested for the final account and release of retention monies.

8 On the morning of 21 January 2013, the defendant put out a Statement of Final Accounts ("1SOFA") that valued the plaintiff's work at \$2,419,789.61. 1SOFA was prepared on the basis of a 17% deduction per column (*ie*, regardless of actual overlaps). After deducting back charges of \$378,832.87 and previous payments of \$1,841,920.64, 1SOFA indicated that an outstanding balance of \$199,036.10 was due to the plaintiff.

9 Some six hours later, the defendant produced a revised Statement of Final Account ("2SOFA"), which valued the plaintiff's work at \$1,924,462.58. 2SOFA was purportedly prepared on the basis of the volume of the JGP columns installed by the plaintiff, nett of the actual overlaps (*ie*, not a fixed deduction). After deducting back charges and previous payments, the revised document showed a negative balance (*ie*, an overpayment) of \$296,290.93.

10 The plaintiff accepted the deductions made by the defendant for back charges. However, it disputed the defendant's valuation of the work done. According to the plaintiff, the correct valuation of the works was \$2,670,818.74. This figure translated to an unpaid balance of \$481,569.80 due to the plaintiff, after accounting for the back charges and previous payments. The plaintiff's valuation was derived by deducting 10% (a fixed percentage) from the nominal volume of the JGP columns installed by the plaintiff, and multiplying that figure by the unit rate of \$92 per cubic metre.

11 On 9 September 2013, the plaintiff commenced the present action, claiming the unpaid value of its works. On 17 October 2013, the defendant filed its defence and counterclaimed for \$62,886.07 for overpayment to the plaintiff, and \$55,348.40 for outstanding machinery rental incurred by the plaintiff. The plaintiff admitted liability for the outstanding machinery rental.

12 Up to this point, the plaintiff was relying on its valuation of \$2,670,818.74 (after applying the 10% fixed deduction). The defendant had at various points, produced different valuations:

- (a) 21 January 2013 (at 10.25a.m.): \$2,419,789.61.

(b) 22 January 2013 (at 4.27p.m.): \$1,924,462.58.

(c) 17 October 2013: \$2,157,867.44.

### ***The versions of the Agreement***

13 There are two versions of the contract, one produced by each party, with slightly different terms.

14 In the plaintiff's version ("the Plaintiff's Contract"), the term "triangle grid spacing" is used in item 2 of Appendix A – Schedule of Prices, as follows:

2. Supply and install nominal 1600mm, 1800mm & 2000mm diameter with *triangle grid spacing* to the required treatment depth as per Civil Tech's Consultant design and drawing (quantities are provisional).

[emphasis added]

15 In the defendant's version ("the Defendant's Contract"), the term "triangle grid spacing" is not used. Item 2 of Appendix A – Schedule of Prices in the Defendant's Contract states as follows:

2. Supply & install jet grout piles, drilling commencing from existing ground level to required design depth varies from 17 to 36m, treatment depth varies from 1.5 to 4m, all in accordance to Specification and drawing (*Quantity shall measure nett on as-built drawing*)

[emphasis added]

16 There are two issues to be determined to resolve the dispute between the parties:

(a) Whether the Plaintiff's Contract or the Defendant's Contract represented the final agreement between the parties.

(b) How the plaintiff's work should be measured.

### **Which version is the binding contract**

17 The parties agree that there was an earlier version of the agreement and that it was revised at an unascertained date. This revised version constituted the contract between them. The sole question is whether this was the Plaintiff's Contract or the Defendant's Contract.

18 The plaintiff's sole witness was Chim Chee Kan ("Mr Chim") who was its executive director at the material time. He testified that he went to the defendant's office and was provided with the Defendant's Contract in duplicate. He proceeded to sign the acceptance page of both copies. He then affixed the plaintiff's company stamp on every page of the document and initialled each page of it, starting from the last page and proceeding to the first. However he stopped initialling midway as he noticed terms that were not in order. He requested for amendments to be made and returned the duplicates to Dora Tay ("Ms Tay"), the defendant's contracts manager. He testified that it was this amended version, which is the Plaintiff's Contract, that was the one that the parties had agreed to.

19 The defendant takes a diametrically opposite position. The defendant submits that the Defendant's Contract reflects the final agreement between the parties. The defendant's project

director at the material time, Chua Thing Chong ("Mr Chua") testified that, he re-read the Plaintiff's Contract sometime after the document was signed by all the relevant parties. It was at this point that he realised Appendix A – Schedule of Prices of the Plaintiff's Contract did not provide that the plaintiff would be paid on the basis of nett treated volume, as was agreed between the parties. Thus, he instructed Ms Tay to amend the Plaintiff's Contract, and the Defendant's Contract was the product of this amendment.

### ***Decision***

20 After careful consideration of the evidence of the witnesses, I am satisfied that the Plaintiff's Contract had come later in time. Unlike Mr Chua's account which appears to be largely uncorroborated, I find Mr Chim's account of events to be largely consistent with the contemporaneous evidence. I set out my reasons below.

#### *Versions of the Defendant's Contract*

21 I note that the defendant had produced two different copies of the Defendant's Contract *ie*, with slight differences in the placement of the signatures and company stamps on each copy. This indicates that the defendant had retained both copies of the Defendant's Contract after they were signed. This means that a copy of the Defendant's Contract was not handed to the plaintiff, which is consistent with the plaintiff's position that this was not the final version of the contract between them because if it was, then the defendant would not be in possession of both copies as one would be handed to the plaintiff. Indeed in both versions of the contract it is stated that "the duplicate copy is for [the subcontractor's] retention". I further note that this part of the evidence appears to corroborate another aspect of Mr Chim's evidence – his claim that he had returned to the defendant the duplicates of the Defendant's Contract for amendments to be made.

#### *Discrepancies between both versions of the contract*

22 I shall now proceed to examine other relevant discrepancies between both versions of the contract.

#### Missing initials

23 The parties had a practice of initialling every page of contracts, aside from the enclosures. The clearest evidence of this practice may be found in the main body of the Plaintiff's Contract which bears the initials of Mr Chim, Mr Chua and Mr Tan Hang Meng ("Mr Tan"), the defendant's managing director. In contrast, some of these initials were conspicuously absent from the main body of the Defendant's Contract. Although Mr Tan's full signature appeared near the end of the main body of the Defendant's Contract, his initials were missing from the rest of the document. It is also significant to note that Mr Chim's initials were also missing from the first five pages of the Defendant's Contract.

24 On balance, I find that the missing initials lend credence to Mr Chim's account of events. The absence of Mr Chim's initials on the first five pages of the Defendant's Contract is consistent with his evidence that he started initialling the document from back to front, but stopped when he realised that the terms of the Defendant's Contract were not in order.

25 The defendant, on the other hand, was unable to discredit Mr Chim's account of events. Mr Chua sought to downplay the significance of the missing initials and insisted that the Defendant's Contract was valid notwithstanding the missing initials since the "crucial part" of the document *ie*, the acknowledgement and acceptance page, was signed. This argument clearly misses the point. The

crux of the dispute is whether the Plaintiff's Contract or the Defendant's Contract evidences the final agreement between the parties. The fact that the acknowledgement and acceptance page of the Defendant's Contract was signed does not solve the conundrum since the same could be said for the Plaintiff's Contract.

26 Although Mr Chua also attempted to explain the absence of Mr Tan's initial by suggesting that the latter might have been too busy to initial the Defendant's Contract given the company's phenomenal growth from a \$10m company to a \$400m company within two years, his explanation did not stand scrutiny because Mr Tan had time to initial the Plaintiff's Contract as well as the contract for the C482 Project. This fact is certainly more consistent with the plaintiff's position than that of the defendant.

Numbering of sub-clauses in cl 2

27 The defendant took pains to stress that the sub-clauses in cl 2 of the Defendant's Contract were logically numbered whereas the same clauses in the Plaintiff's Contract were not. The defendant asserted that it would be illogical that the contract would have been re-numbered in the manner shown in the Plaintiff's Contract.

28 I am not persuaded by this argument as it does not unequivocally lead to the conclusion that the Defendant's Contract came later in time. It is equally possible that the numbering was disrupted when the Plaintiff's Contract was amended to the Defendant's Contract. I do not think that this point favours one version over the other.

*Adverse inference for failing to call Ms Tay*

29 The reasons given above are sufficient to support a finding that the Plaintiff's Contract came later in time. However I would like to also address the plaintiff's argument that an adverse inference should be drawn against the defendant for failing to call Ms Tay and Mr Tan as witnesses at the trial. According to the plaintiff, Ms Tay is the person who would be in the best position to clarify matters such as the date on which the contract was amended and identify the version of the contract that evidences the final agreement between the parties, whereas Mr Tan would be best placed to explain why, contrary to what he did for previous contracts, he did not put his initials on the Defendant's Contract.

30 The defendant counters this submission by contending that the issue of contract amendment only arose during the trial and prior to that, it was not possible to tell that Ms Tay's evidence would be relevant. However, there was no explanation offered for Mr Tan's absence.

31 I am of the view that an adverse inference should be drawn against the defendant for failing to call Ms Tay as a witness. However, it is not appropriate to do the same for the defendant's failure to call Mr Tan.

32 In the process of litigation, parties have the prerogative to call all witnesses they deem necessary to advance their case. While they may elect not to exercise this prerogative, the court is entitled to presume that "evidence which could be and is not produced would if produced be unfavourable to the person who withholds it". According to Newton and Norris JJ in *O'Donnell v Reichard* [1975] VR 916 at 929:

[W]here a party without explanation fails to call as a witness a person whom he might reasonably be expected to call, if that person's evidence would be favourable to him, then, although the jury

may not treat as evidence what they may as a matter of speculation think that person would have said if he had been called as a witness, nevertheless it is open to the jury to infer that that person's evidence would not have helped the party's case; if the jury draw that inference, then they may properly take it into account *against the party in question* for two purposes, namely: (a) in deciding whether to accept any particular evidence, which has in fact been given, either for or against that party, and which relates to a matter with respect to which the person not called as a witness could have spoken; and (b) in deciding whether to draw inferences of fact, which are open to them upon evidence which has been given, again in relation to matters with respect to which the person not called as a witness could have spoken. [emphasis in original]

33 In Singapore, the source of the court's power to draw such an inference lies in s 116(g) of the Evidence Act, which relevantly provides:

**Court may presume existence of certain fact**

116. The court may presume the existence of any fact which it thinks likely to have happened, regard being had to the common course of natural events, human conduct, and public and private business, in their relation to the facts of the particular case.

...

(g) that evidence which could be and is not produced would if produced be unfavourable to the person who withholds it;

34 In *Cheong Ghim Fah and another v Murugian s/o Rangasamy* [2004] 1 SLR(R) 628 at [42], V K Rajah JC endorsed the following principles laid down by the English Court of Appeal in *Wisniewski v Central Manchester Health Authority* [1998] 5 PIQR 324:

(1) In certain circumstances a court may be entitled to draw adverse inferences from the absence or silence of a witness who might be expected to have material evidence to give on an issue in an action.

(2) If a court is willing to draw such inferences, they may go to strengthen the evidence adduced on that issue by the other party or to weaken the evidence, if any, adduced by the party who might reasonably have been expected to call the witness.

(3) There must, however, have been some evidence, however weak, adduced by the former on the matter in question before the court is entitled to draw the desired inference: in other words, there must be a case to answer on that issue.

(4) If the reason for the witness's absence or silence satisfies the court, then no such adverse inference may be drawn. If, on the other hand, there is some credible explanation given, even if it is not wholly satisfactory, the potentially detrimental effect of his/her absence or silence may be reduced or nullified.

[per Brooke LJ]

35 Before an adverse inference may be drawn against a party for the absence of a material witness, the court must be satisfied of the availability and materiality of the evidence. I am of the view that both elements are satisfied *vis-à-vis* Ms Tay for the following reasons:

(a) Availability: Under cross-examination, Mr Chua said that Ms Tay remained in the employ of the defendant company. He did not say that she was unavailable.

(b) Materiality: Ms Tay is the key person to shed light on the circumstances surrounding the signing of the contract. The failure to call her as a witness resulted in the situation in which neither party could tell the court when exactly the contract was signed or amended.

36 That said, I am not sufficiently convinced about the materiality of the evidence that Mr Tan would have given, had he been called to testify at the trial. Apart from the act of signing and/or initialling the contract, there is no suggestion by the parties that Mr Tan's evidence would have been material to the other issues at the trial. The only real reason to call him as a witness would be to clarify why he did not initial on all the pages of the Defendant's Contract when he had done so for the Plaintiff's Contract. His evidence appears to be of limited relevance. This is rather unlike the situation *vis-à-vis* Ms Tay who was personally involved in the preparation and drafting of the contract.

37 In view of the above, the adverse inference drawn against the defendant for failing to call Ms Tay added another string to the plaintiff's evidential bow. For completeness, I would like to address a few other points raised by the defendant which I considered and rejected.

#### *Additional observations*

##### Project manager

38 The defendant contends that Mr Ong Kok Peng's ("Mr Ong") designation as the project manager in the Defendant's Contract suggests that the Defendant's Contract came later in time. The Plaintiff's Contract states that Gan Kok Leong ("Mr Gan") was the project manager, whereas Defendant's Contract states Mr Ong as the project manager. According to the affidavits of Mr Chua and Mr Ong, Mr Ong was eventually appointed the project manager of MC01 Project around July 2010, to replace the original project manager, Mr Gan, who was reassigned. Therefore, the defendant argues that this factor alone shows that Defendant's Contract came later in time because it reflects an accurate update as to the identity of the project manager.

39 I am not convinced. *First*, there is no clear evidence that Mr Ong was appointed the project manager of MC01 Project around July 2010; the objective evidence showed that Mr Ong was only appointed the project manager around July 2011. Mr Ong testified that he was appointed the project manager around July 2011. This is borne out by the documentary evidence since he was only reflected as the project manager in payment certificates issued after July 2011.

40 *Second*, it is impossible to draw the conclusion that the Plaintiff's Contract was amended to reflect Mr Ong's updated designation. On the defendant's own case, the contract was amended somewhere between late June 2010 (when the first interim valuation was issued) and October 2010 (when the second interim valuation was issued). Thus, the amendment would have come quite a long way before Mr Ong was actually appointed the project manager.

41 In this regard, it is equally important to note that the last payment certificate, as well as 1SOFA and 2SOFA, were signed by Mr Gan because Mr Ong was later reassigned to another project. If anything, this goes to show that there may be multiple changes of project managers over the course of one project. Thus, Mr Ong's designation in the Defendant's Contract and his subsequent assignment as the project manager could be a mere factual coincidence. Seen in that light, the significance of Mr Ong's designation in the Defendant's Contract is greatly reduced.

Removal of "quantity shall measure nett on as-built drawing"

42 The defendant argues that since the phrase “quantity shall measure nett on as-built drawing” was more favourable to the defendant, it is inherently illogical that Mr Chua would have amended the Defendant’s Contract to remove those words. However the same could be said about the Plaintiff’s Contract. Since the plaintiff claims that the term “triangle grid spacing” favoured its claim, it would be similarly illogical for the plaintiff to agree to an amended contract that omits that term. Thus, the defendant’s argument is essentially self-serving and devoid of merit.

43 Looking at the matter in the round, whilst there are indeed shortcomings in the plaintiff’s evidence, there remains sufficient evidence to show on a balance of probabilities that the Plaintiff’s Contract came later in time, and therefore documented the final agreement between the parties.

### **How the contract should be interpreted**

44 To re-cap, following from my finding that the Plaintiff’s Contract evidences the final agreement between the parties, it leaves to be determined the method of measuring the work done by the plaintiff. The parties agree that the final sub-contract sum shall be ascertained by re-measurement based on approved *as-built drawings*. This is provided for in cl 2.3 of both versions of the contract.

### **Adequacy of plaintiff’s pleadings**

45 Before delving into the parties’ submissions proper, I shall deal with the defendant’s preliminary objections to the plaintiff’s case. The main thrust of the defendant’s objections is that the fixed deductions of 5.77%, 10% and 18% were never pleaded.

46 Pleadings serve to define the dispute between parties: *Bullen & Leake and Jacob’s Precedents of Pleadings* (Sweet & Maxwell, 17th Ed, 2012) vol 1, para 1-01. The function of pleadings have been summarised by the High Court of Australia in *Dare v Pulham* (1982) 148 CLR 658 (at p 664):

Pleadings and particulars have a number of functions: they furnish a statement of the case sufficiently clear to allow the other party a fair opportunity to meet it (*Gould and Birbeck and Bacon v. Mount Oxide Mines Ltd. (In liq.)* [(1916) 22 CLR 490, at p 517]; they define the issues for decision in the litigation and thereby enable the relevance and admissibility of evidence to be determined at the trial (*Miller v. Cameron* [(1936) 54 CLR 572], at pp 576-577; and they give a defendant an understanding of a plaintiff’s claim in aid of the defendant’s right to make a payment into court. ...

47 In *NEC Semi-Conductors Ltd v The Commissioners for Her Majesty’s Revenue and Customs* [2006] EWCA Civ 25, Mummery LJ added a further gloss to the issue (at [131]:

While it is good sense not to be pernickety about pleadings, the basic requirement that material facts should be pleaded is there for a good reason—so that the other side can respond to the pleaded case by way of admission or denial of facts, thereby defining the issues for decision for the benefit of the parties and the court. Proper pleading of the material facts is essential for the orderly progress of the case and for its sound determination. The definition of the issues has an impact on such important matters as disclosure of relevant documents and the relevant oral evidence to be adduced at trial. In my view, the fact that the nature of the grievance may be obvious to the respondent or that the respondent can ask for further information to be supplied by the claimant are not normally valid excuses for a claimant’s failure to formulate and serve a properly pleaded case setting out the material facts in support of the cause of action. ...

48 As pleadings form the backbone of a litigation, parties are strictly bound by their pleadings and the court may not decide on issues not raised therein: *Kiaw Aik Hang Co Ltd v Tan Tien Choy* [1964] MLJ 99. Moreover, the deficiencies in pleadings may not be made good by affidavit evidence or other forms of evidence: Jeffrey Pinsler, *Supreme Court Practice 2014* vol 1 (Lexis Nexis 2014) at para 18/19/4.

49 More recently, in *Sembcorp Marine Ltd v PPL Holdings Pte Ltd and another and another appeal* [2013] 4 SLR 193 (at [73]), the Court of Appeal highlighted the significance of proper pleadings where parties attempt to introduce contextual evidence to construe a contract.

... Therefore, to buttress the evidentiary qualifications to the contextual approach to the construction of a contract, the imposition of four requirements of civil procedure are, in our view, timely and essential:

(a) first, parties who contend that the factual matrix is relevant to the construction of the contract must plead with specificity each fact of the factual matrix that they wish to rely on in support of their construction of the contract;

(b) second, the factual circumstances in which the facts in (a) were known to both or all the relevant parties must also be pleaded with sufficient particularity;

(c) third, parties should in their pleadings specify the effect which such facts will have on their contended construction; and

(d) fourth, the obligation of parties to disclose evidence would be limited by the extent to which the evidence are relevant to the facts pleaded in (a) and (b).

#### *Fixed deduction of 5.77%*

50 In the statement of claim, the plaintiff pleaded that the "nett volume of each triangle grid" (the "triangle grid method") was to be used to compute the work done by the plaintiff, and that the method was borne out by the course of dealing between the parties as well as industry norms. However, the statement of claim did not define the triangle grid method, and did not plead the quantity of work done. These details were only provided in the reply dated 8 November 2013 in the following manner:

(a) In Annex B of the reply, the plaintiff alluded to a 5.77% deduction by setting out an area ratio of 94.23%.

(b) At para 49 of the reply, the plaintiff stated the total quantity of work done to be 27, 943.682 cubic metres.

51 The defendant argues that the plaintiff has failed to plead the fundamental basis of its claim, and that this deficiency is fatal to the plaintiff's claim. To this end, the defendant cites the Court of Appeal decision in *Romar Positioning Equipment Pte Ltd v Merriwa Nominees Pty Ltd* [2004] 4 SLR(R) 574 ("*Romar Positioning*") for the proposition that the reply cannot be used to supplement the statement of claim.

52 I do not accept the defendant's contention. Whilst parties may not raise new claims in the reply, the rule does not go so far as to prevent a party from further particularising or supplementing a point that has been raised in a previous pleading. The general rule is that a party may plead any

matter which has arisen at any time, whether before or since the issue of the writ: O 18 r 9 of the Rules of Court (Cap 322, R 5, 2014 Rev Ed) ("ROC"). However, this right is qualified by O 18 r 10(1) of the ROC which provides:

A party shall not in any pleading make an allegation of fact, or raise any new ground or claim, *inconsistent* with a previous pleading of his.

[emphasis added]

53 In the present case, the plaintiff did not seek to introduce an inconsistent plea in the reply. What it did was to particularise the triangle grid method which was pleaded in the statement of claim.

54 Furthermore, the case of *Romar Positioning* does not quite assist the defendant. The circumstances in that case were very different. The respondent included, in its amended reply, a position that was diametrically opposite to that adopted in its statement of claim. On that basis, the Court of Appeal found that the respondent had introduced an inconsistent plea which should have been made in the alternative in the statement of claim.

55 Since the plaintiff was entitled to supplement the statement of claim in the reply, the failure to mention the 5.77% deduction in the statement of claim is not fatal to its case.

#### *Fixed deductions of 10% and 18%*

56 I am of the view that the plaintiff is not entitled to rely on the deductions of 10% and 18% because these percentages were not included in its pleadings. It is trite that deficient pleadings may not be cured by the evidence in an affidavit and other form. This point is made abundantly clear in *Abdul Latif bin Mohammed Tahiar (trading as Canary Agencies) v Saeed Husain s/o Hakim Gulam Mohiudin (trading as United Limousine)* [2003] 2 SLR(R) 61 MPH Rubin J said (at [7]):

... It is a settled principle of law that parties stand by their pleaded case and any defect in the pleadings cannot be cured by any averments in affidavits, let alone an oblique reference in counsel's closing speech ...

57 Although the plaintiff claims to have pleaded an estoppel on the basis of an 18% deduction, it clearly did not do so. The relevant parts of the statement of claim read as follows:

10 ... The Plaintiffs aver that each payment invoiced was without exception certified as due and owing by the Project Quantity Surveyor, and/or Manager, and/or Director on the basis that the Plaintiffs were, pursuant to the terms of the Sub-Contract Agreement, entitled to payment to be computed according to the *volume of each triangle grid* as opposed to the volume of the total treated area. The Plaintiffs will further aver that the Defendants are in the premises, estopped from denying that the payment was to be computed on that basis. *Further or in the alternative, the Plaintiffs plead an estoppel by convention arises [sic] in this regard.*

11 The Plaintiffs will further place reliance on the previous course of dealing between the parties and the industry norms to aver that the Sub-Contract Agreement referred to costing on the basis of *nett volume of each triangle grid*.

[emphasis added]

58 As is clear from above, the pleaded estoppel pertained only to the triangle grid method, which

according to the plaintiff, entails a 5.77% deduction. In the course of the trial the plaintiff realised its pleadings were deficient in relation to the 10% and 18% deductions and applied to amend its statement of claim to include these percentages. However that application was withdrawn in the face of objections from the defendant. In my view, there is no pleading that states the plaintiff's alternative case of 10% and 18% deductions. Therefore the plaintiff is not entitled to any findings in this regard whatever the state of the evidence.

59 On a related note, the plaintiff attempts to rely on the same estoppel argument as a defence to the counterclaim. However, since the point has not been pleaded in the statement of claim or the reply, the plaintiff may not rely on it.

60 I accept that the court is free to depart from the pleaded meanings to construe the contract since an objective interpretation of a contractual term "is quite different from listening to the parties' version of what they each meant": *Quainoo v NZ Breweries Ltd* [1991] 1 NZLR 161 at 165, line 18. However, parties are not permitted to put forth a case that is clearly inconsistent with its pleaded case.

61 In view of my findings, the only issues that fall to be determined are as follows:

- (a) whether, upon a proper construction of the contract, the parties intended to adopt the triangle grid method (*ie*, 5.77% deduction) or the treated area method to compute work done by the plaintiff; or
- (b) whether the defendant is estopped by convention from denying that the triangle grid method (*ie*, 5.77% deduction) applies to compute work done by the plaintiff.

### ***Measurement of the plaintiff's work***

62 The modern starting point of contractual interpretation may be found in Lord Hoffmann's statement in *Investors Compensation Scheme Ltd v West Bromwich Building Society* [1998] 1 WLR 896 (at 912H) that:

Interpretation is the ascertainment of the meaning which the document would convey to a reasonable person having all the background knowledge which would reasonably have been available to the parties in the situation in which they were at the time of the contract.

63 The court has no power to improve upon the instrument which it is called upon to construe, whether it be a contract, a statute or articles of association. It naturally follows that the court may not introduce terms to make the contract fairer or more reasonable: *Attorney General of Belize and others v Belize Telecom Ltd and another* [2009] 1 WLR 1988 at [16].

64 Contractual terms must be construed in the light of the *context* in which they were drafted. The relevance of the context cannot be overstated. As stated by Lord Hoffmann in *Kirin-Amgen Inc v Hoechst Marion Roussel Ltd* [2005] RPC 169 at [64]:

No one has ever made an acontextual statement. There is always some context to any utterance, however meagre.

However, as I have earlier observed (at [49]), such contextual evidence may only be introduced if it has been properly pleaded.

### ***5.77% deduction***

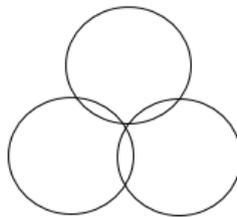
65 The sub-contract sum is derived from the product of the agreed unit rate and the quantity of work done.

(a) Agreed unit rate: The parties agree that the unit rate was fixed at \$92 per cubic metre. The issue of “per cubic metre” of what is addressed in (b) below.

(b) Quantity of work done: The parties also agree that the quantum of work done was to be ascertained through re-measurement on the basis of information provided by approved *as-built drawings*. However, the parties disagree as to how such re-measurement was to be carried out.

The plaintiff’s case

66 The plaintiff contends that the *triangle grid method* was to be used to account for the overlaps between the columns. A “triangle grid” refers to an arrangement of JGP columns within a group such that the centres of three adjacent circular piles form a triangle, as shown in the figure below:



67 In such a triangle grid (comprising only of three circles), there are *three* overlaps. This gives an average of one overlap per circle (and consequently, per JGP column). This arrangement results mathematically in each overlap area to be 5.77% (rounded to the nearest 0.01%) of the area of each circle. On this basis, the plaintiff contends that 5.77% should be deducted from the total nominal volume of the JGP columns installed by the plaintiff.

68 At the heart of the plaintiff’s case lies the term “triangle grid spacing” which appears at Appendix A – Schedule of Prices of the Plaintiff’s Contract:

Supply and install nominal 1600mm, 1800mm & 2000mm diameter with *triangle grid spacing* to the required treatment depth as per Civil Tech’s Consultant design and drawing (quantities are provisional).

[emphasis added]

The plaintiff contends that the term “triangle grid spacing” means a fixed deduction of 5.77% per pile on the basis of the three column configuration illustrated in [66] above. This means that the plaintiff was entitled to payment for 94.23% of the nominal volume of its JGP columns.

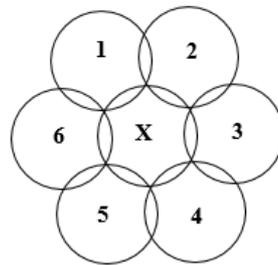
69 According to the plaintiff, this interpretation of “triangle grid spacing” is borne out by the *parties’ course of dealing* and *industry norms*. To establish course of dealing, the plaintiff relied on a previous contract between the same parties. This was the contract dated 23 December 2009 for the C482 Project. There, the same or similar terminology was employed, and the plaintiff contends that it was clearly understood by parties to refer to costing on the basis of the nett volume of each triangle grid.

70 The plaintiff brought in two expert witnesses to establish industry norms with respect to the

triangle grid method. The first, Mr Martin Anthony Riddett ("Mr Riddett") gave evidence that besides "a method of work, [the triangle grid] can also be a reference for pricing purpose". The second, Mr Er Murthy Abhishek ("Mr Abhishek") gave evidence that the triangle grid method is the "most common method" of measurement.

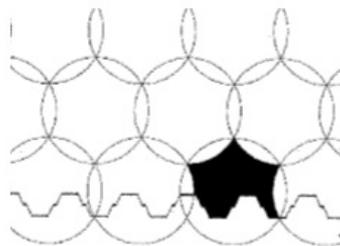
The defendant's case

71 The defendant contends that the triangle grid was a method of construction, not a method used to calculate work done. *First*, the defendant argues that the triangle grid method does not make any allowance for actual further overlaps that would occur in the course of construction. Since the triangle grids will eventually form an entire concrete block, the assumption of one overlap per JGP column is *inaccurate*. The defendant cites as example the situation of seven interlocking JGP columns, as shown below:



72 In such a situation where Column X was installed after Columns 1-6, its volume would be reduced by six times of 5.77%, *ie*, approximately 34.6%. At this point, it is worth noting that in the situation where there is a large number of columns, there would be an average of three overlaps per column and the reduction in volume for each column would be  $3 \times 5.77\%$ , which works out to 17.3%. This figure is significant as it is close to the 18% deduction used by the defendant in making progress payments to the plaintiff.

73 Besides that, the defendant asserts that the percentage to be deducted per JGP column could go up to 53.2% in a case where the JGP column overlaps with four other columns as well as sheet piles as shown in the diagram below.



7 4 *Second*, the defendant contends that the triangle grid method fails to account for situations where an equilateral triangle has not been formed *eg*, where the three-pile group consists of one pile of a different diameter. The formula operates on the assumption that the centres of the three columns form an equilateral triangle.

75 Furthermore, the defendant stresses the fact that the 5.77% deduction was never mentioned until 25 June 2012, after the plaintiff's works were completed. On 25 June 2012, Mr Chim sent Mr Ong an email that reads:

We refer to our meeting on the 22nd June 2012 at your site office.

We are pleased to attach the computation of effective area of treatment by JGP method using triangle spacing as per our discussion last Friday.

We would like you to review the attachment and we can meet soon to finalized [*sic*] the subcontract's final account.

76 The defendant argues that the above email did not refer to any pre-existing understanding of the triangle grid method, and that even then, it was not obvious to a reader how the plaintiff was calculating its final claim.

77 In light of the aforementioned difficulties with the concept of the triangle grid method, the defendant contends that the "nett volume of the total treated area" should be preferred ("treated area method"). This method takes into account the actual overlaps and deducts them from the nominal volume of the JGP columns.

#### Decision

78 I do not accept that the plaintiff's concept of the triangle grid method was the contractually agreed method of re-measurement. Besides the inherent problems with the triangle grid formula, I am of the view that the plaintiff's evidence failed to demonstrate credibly that the term "triangle grid spacing" entailed the application of the triangle grid method.

79 *First*, contrary to what the plaintiff alleged, the C482 Project had nothing to do with the triangle grid method. In that project, the plaintiff had consistently claimed on the basis of a 10% deduction but the defendant had certified those claims on the basis of a 17%–18% deduction. It should be noted this is close to the figure of 17.3%, which is the average deduction per pile in the situation where a large number of piles are installed using the "triangle grid spacing" set out in the MC01 Project.

80 *Second*, the plaintiff's expert failed to cast light on any industry practice with respect to the triangle grid method. Mr Abhishek made an *unsubstantiated* claim that the triangle grid method was the "most common method" of re-measurement. He did not cite in support of his opinion any related literature, industry guidelines or other sources. Notably, Mr Abhishek conceded during cross-examination that although there would normally be deductions made, the precise amount of deduction was left to the parties. Like Mr Abhishek, Mr Riddett was also hard-pressed to cite examples of sub-contract or industry guidelines applying the triangle grid method.

81 Most significantly, Mr Chim conceded under cross examination that the 5.77% deduction was never discussed during his negotiations with the defendant. In the circumstances, it is quite likely that the 5.77% deduction was a mere afterthought conjured by the plaintiff.

82 How then should the plaintiff's work be quantified? Although the plaintiff submits that the parties had intended to eschew the treated area method by removing the phrase "quantity shall measure nett on as-built drawing" from Appendix A – Schedule of Prices of the Defendant's Contract, I am unable to agree. In my judgment, the removal of "quantity shall measure nett on as-built drawing" does not exclude the defendant's method of valuation. This is because the following words in cl 2.3 of the Plaintiff's Contract are sufficiently broad to encapsulate the treated area method:

Payment and final Sub-Contract Sum shall be ascertained by re-measurement based on approved

as-built drawings.

83 Apart from referring to the treated area method that the defendant relies upon, I cannot see any other meaning that these words could take. I accept that a fixed deduction per column could be another method of valuing JGP works. That said, the application of a fixed deduction per column is inconsistent with cl 2.3 which requires "re-measurement based on approved as-built drawings". Although as-built drawings contain sufficient information for payment on the basis of a fixed deduction per column, such information is also available from site records which would contain information on the number of JGP columns installed and the depth of each one. More importantly, the fixed deduction method will not entail any "re-measurement" of the as-built drawings whereas this is consistent with the defendant's treated area method which entails measuring actual overlaps between columns and with sheet piles. Finally, under the plaintiff's method, there is absolutely no basis for deductions of 5.77% or 10%. The only number for which there is a rationale is 17.3% (see [72] above). But this number was not even used by the plaintiff in its interim claim and its pleadings in this suit. Therefore, in my judgment, the method of valuation the parties agreed on, as discerned from the clear words of cl 2.3, is the treated area method.

84 Finally, I am not persuaded by the plaintiff's submission that the defendant is estopped from denying the applicability of the triangle grid method. That said, before I proceed to elaborate on the merits of the estoppel argument, I will first consider the plaintiff's submission that "estoppels by convention are not restricted to mere defences but may create a cause of action".

85 Metaphorically, it has been said that an estoppel can only act as a shield, not a sword. This is traditionally understood to mean that an estoppel cannot itself constitute a new cause of action. However this sword/shield dichotomy has been criticised for being too simplistic. It suggests that an estoppel may conceivably be used in only two ways (*viz*, as a cause of action or a defence) when in reality "the use that can be made of an estoppel can be represented by a spectrum ranging from a defence to the creation of a new cause of action": Roger Halson, "The offensive limits of promissory estoppel" (1999) LMCLQ 256 at p 259. "Sword" and "shield" represent two opposite ends of that spectrum. Along this spectrum, it is unclear how far an estoppel may assist in establishing a cause of action: *per* Mance LJ in *Baird Textile Holdings Ltd v Marks & Spencer Plc* [2001] CLC 999 at [88].

86 This issue was explored in *Amalgamated Investment & Property Co Ltd (in liquidation) v Texas Commerce International Bank Ltd* [1982] QB 84 ("*Amalgamated Investment*"). A helpful summary of the case is provided in *Chitty on Contracts* vol 1 (Hugh Beale gen ed) (Sweet & Maxwell, 31st Ed, 2012) at 3-108. A had negotiated with X Bank for a loan to B (one of A's subsidiaries) for the purpose of acquiring and developing a property in the Bahamas. The loan was to be secured by a mortgage on that property and also by a guarantee from A. In the guarantee, A promised to pay all moneys due to X Bank from B. The words were inappropriate since the loan to B was not made directly by X Bank but by one of its subsidiaries, Y Bank. Consequently, if the guarantee were read literally, it would not apply to the loan since no money was due from B to X Bank.

87 The Court of Appeal held that on a true construction, the guarantee applied to the loan made by Y Bank. It took the view that the literal interpretation of the guarantee would defeat the intention of the parties. Even if the guarantee did not produce this result on its true construction, A was estopped by convention from denying that the guarantee covered the loan by Y Bank, since when negotiating the loan, both A and X Bank had assumed that the guarantee did cover it and since X Bank continued to act on that assumption in granting various indulgences to A.

88 A argued that X Bank was seeking to use estoppel as a sword rather than a shield, which the law of estoppel did not permit. Brandon LJ thought otherwise (at 131):

In my view much of the language used in connection with these concepts is no more than a matter of semantics. Let me consider the present case and suppose that [X Bank] had brought an action against [A] before they went into liquidation to recover moneys owed by [B] to [Y Bank]. In the statement of claim in such an action [X Bank] would have pleaded the contract of loan incorporating the guarantee, and averred that, on the true construction of the guarantee, [A was] bound to discharge the debt owed by [B] to [Y Bank]. By their defence [A] would have pleaded that, on the true construction of the guarantee, [A was] only bound to discharge debts owed by [B] to [X Bank], and not debts owed by [B] to [Y Bank]. Then in their reply [X Bank] would have pleaded that, by reason of an estoppel arising from the matters discussed above, [A was] precluded from questioning the interpretation of the guarantee which both parties had, for the purpose of the transactions between them, assumed to be true.

In this way [X Bank], while still in form using the estoppel as a shield, would in substance be founding a cause of action on it. This illustrates what I would regard as the true proposition of law, that, *while a party cannot in terms found a cause of action on an estoppel, he may, as a result of being able to rely on an estoppel, succeed on a cause of action on which, without being able to rely on that estoppel, he would necessarily have failed.* That, in my view, is, in substance, the situation of [X Bank] in the present case.

It follows from what I have said above that I would reject the second argument against the existence of an estoppel put forward on behalf of [A] as well as the first. It further follows, from my rejection of both arguments against the existence of an estoppel, that I would answer the second of the two questions which I formulated earlier by holding that, if [A] did not, by the contract relating to the Nassau loan, undertake to [X Bank] to discharge any indebtedness of [B] to [Y Bank], they are, nevertheless, estopped from denying that they did so by reason of the basis, accepted by both [X Bank] and [A], on which the transactions between them were later conducted during the period from 1974 to 1976.

[emphasis added]

89 It may be discerned from the above passage that a party may rely on an estoppel to preclude its counterparty from questioning the interpretation of a contractual term. This is so even if the estoppel operated to assist that party to enforce a cause of action which would otherwise fail.

90 Further judicial support for this approach may be found in *Shoreline Housing Partnership Ltd v Mears Ltd* [2013] EWCA Civ 639 ("*Mears*"). In that case, Gloster LJ drew a distinction between the situation where a claimant was seeking to set up a contract by estoppel, where there was no contract at all and the case where an estoppel is alleged to have qualified the terms of the contract and where it is alleged that the parties conducted their contractual relationship on the basis of an assumed and shared state of facts or law (at [23]). It was held that the former fell afoul of the rule that an estoppel does not operate as a sword, but not the latter.

91 To my mind, the correctness of the approach, as established in *Mears* and *Amalgamated Investment*, is fortified by examining the circumstances in which the sword/shield dichotomy originated. The dichotomy was first used in argument by counsel and then adopted by Birkett LJ in the oft-cited English Court of Appeal decision of *Combe v Combe* [1951] 2 KB 215. In that case, the issue was whether the plaintiff could recover maintenance on her husband's promise upon which she had relied. Reliance was placed on promissory or equitable estoppel. The wife's claim was rejected. Whilst it was held that an estoppel never stands alone as giving a cause of action in itself, Denning LJ (in his opinion) accepted that an estoppel may nevertheless play a supplementary role in establishing a cause of action (at 220):

In none of these cases was the defendant sued on the promise, assurance, or assertion as a cause of action in itself: he was sued for some other cause, for example, a pension or a breach of contract, and the promise, assurance or assertion only played a supplementary role—an important role, no doubt, but still a supplementary role. That is, I think, its true function. It may be part of a cause of action, but not a cause of action in itself.

92 The above cases show that the “sword” metaphor was intended to describe situations where a party’s cause of action is simply a “naked” estoppel, *ie*, where the estoppel itself is the cause of action. It was not meant to include situations (like the present) where the estoppel merely supplements an existing cause of action.

93 Here, the plaintiff seeks to estop the defendant from interpreting the sub-contract in a manner that is contrary to the parties’ understanding and conduct. The plaintiff asserts that the parties had, by their conduct, established a pricing mechanism to calculate work done under the sub-contract. The plaintiff’s cause of action is founded on a contractual right to be paid, and the estoppel merely informs the interpretation of the payment terms. The estoppel itself is not the cause of action. There is therefore no legal impediment to the plaintiff’s reliance on the estoppel to assist its contractual claim.

94 I turn now to examine the merits of the estoppel argument.

95 To establish an estoppel by convention, the following elements must be present (*Travista Development Pte Ltd v Tan Kim Swee Augustine and others* [2008] 2 SLR(R) 474 at [31]):

- (a) The parties must have acted on “an assumed and incorrect state of *fact or law*” [emphasis added] (*per* Bingham LJ in *The Vistafjord* [1988] 2 Lloyd’s Rep 343 at 352) in their course of dealing.
- (b) The assumption must be either shared by both parties pursuant to an agreement or something akin to an agreement, or made by one party and acquiesced to by the other.
- (c) It must be unjust or unconscionable to allow the parties (or one of them) to go back on that assumption.

96 Here, there is no evidence that the plaintiff assumed that a 5.77% deduction would apply. In the statement of claim and the reply, the plaintiff averred that the interim claims were certified on the basis of the triangle grid method which entails a deduction of 5.77%. This is not true. The plaintiff had consistently claimed on the basis of a 10% deduction and the defendant had certified those claims on the basis of an 18% deduction. In fact, the triangle grid method was not invoked until 25 June 2012, approximately two years after the parties entered into the MC01 contract. Since there is no evidence that the plaintiff had assumed that a 5.77% deduction would apply, there can be no estoppel to speak of.

97 In contrast, had the plaintiff pleaded an estoppel on the basis of an 18% deduction, I would have been prepared to find that the defendant was estopped from relying on the treated area method for the following reasons.

9 8 *First*, the defendant had consistently been applying an 18% deduction to the interim claims. *Second*, under cross-examination, Mr Chua conceded that the final account of the C482 Project was settled at a fixed deduction of 18%. This settlement was reached despite clear words in the contract for the C482 Project providing for measurement based on the “treated area of JGP works”. *Finally*, the

plaintiff appears to have relied on the assumption of an 18% deduction to its detriment, although I must state that the evidence, such as it is, is not conclusive. The plaintiff certainly was stunned with the large deduction that the defendant had made to its claims and that was what triggered this suit. Pertinently, the defendant's Mr Ong admitted that if the interim claims had been certified on the basis of a much higher deduction (as opposed to the 18% deduction that was actually applied), the "subcontractor will run".

### **Whether counterclaim should succeed**

99 The defendant values the plaintiff's work at \$2,097,867.44. This figure is the product of the unit rate of \$92 per cubic metre and the nett treated volume of 22,802.907 cubic metres. The defendant also accepts that the plaintiff is entitled to another sum of \$60,000 as a "mobilisation fee". This gives a final sub-contract sum of \$2,157,867.44. After deducting back-charges of \$378,832.87 and previous payments totalling \$1,841,920.64, there is a negative balance of \$62,886.07. On this basis, the defendant contends that the plaintiff has been overpaid \$62,886.07 and seeks the refund of the same.

100 Save for the nett treated volume, the rest of the figures are not in dispute. To succeed in its counterclaim, the defendant has to prove that the plaintiff has completed works amounting to a nett treated volume of 22,802.907 cubic metres. To establish the nett treated volume, the defendant relies on numbers contained in a table that appears in Mr Ong's affidavit of evidence-in-chief ("AEIC") ("the Table"). These numbers are stated to be derived from calculations done using Autocad software, on the basis of information contained in as-built drawings.

101 Save for the assertion that those numbers were computed using Autocad software, it is unclear how they were derived. In his AEIC, Mr Ong gave evidence that he was familiar with Autocad, and that he had verified those calculations. He did not explain in his AEIC how he had done so. At the trial, however, Mr Ong took a different position. Under cross-examination, he said that the calculations were done by the defendant's employee, Ms Khaizar. He also admitted that he had only conducted a random check *ie*, he did not check all the numbers.

102 It is clear that Mr Ong was in no position to give evidence on the veracity of the figures in the Table. Instead, Ms Khaizar is the best person to explain the numbers that the defendant is seeking to rely on. She is the only person with direct knowledge of how the numbers were calculated. However, Ms Khaizar was not called as a witness although she remains in the employ of the defendant company. In view of Ms Khaizar's absence at the trial, the defendant may not rely on the truth of the contents of the Table to establish its counterclaim unless the evidence falls within one of the exceptions to the hearsay rule.

103 Generally, the hearsay rule renders inadmissible a document adduced to establish the facts it refers to in the absence of direct evidence of the facts contained therein: Jeffrey Pinsler, *SC Evidence and the Litigation Process* (LexisNexis, 4th Ed, 2013) at para 4.001. Direct evidence would take the form of the evidence of someone who has personal knowledge of those facts.

104 In my view, the information in the Table does not fall within any of the exceptions to the hearsay rule. In particular, I am of the view that the defendant may not avail itself of the exception contained in s 32(1)(b) of the Evidence Act which permits the admission of statements "made by a person in the ordinary course of a trade, business, profession or other occupation". The rationale for this exception has been stated in M C Sarkar et al, *Sarkar's Law of Evidence vol I* (LexisNexis, 17th Ed Reprint, 2011) ("*Sarkar's Law of Evidence*") at p 970:

The ground of admission is that a statement or entry made in the ordinary course or routine of business or duty may be presumed to have been done from disinterested motive and may therefore be taken to be generally true.

105 To qualify under this exception, the entry must have been in the way of business. This has been defined to mean a course of transactions performed in one's habitual relations with others and as a material part of one's mode of obtaining a livelihood: *Sarkar's Law of Evidence* at p 973.

106 Here, it must be borne in mind that the Table exhibited in Mr Ong's AEIC was prepared for the purposes of litigation. Furthermore, there is no evidence to show that the information contained in the Table was extracted from any document that was prepared in the ordinary course of trade, business, profession or other occupation. That being so, it is my view that the Table is inadmissible for the purposes of proving the quantity of work done by the plaintiff.

107 There are also other difficulties with the admission of the figures contained in the Table. If Ms Khaizar had done the calculations on the basis of information from the Autocad software, the question remains as to where that information had come from. Details such as the location of the JGP columns and the sequence in which the columns were installed are out-of-court statements that will similarly constitute hearsay evidence.

108 The defendant's counterclaim appears to be constructed on multiple layers of hearsay evidence. What is troubling is that the defendant does not seem to be cognizant of the heavy, if not sole, reliance on hearsay evidence. I further note that there is a conspicuous absence of any safeguards or measures which would ensure a minimal degree of reliability of the evidence. As noted at [12] above, the defendant has proffered different valuations of the plaintiff's work at different junctures.

109 In view of these shortcomings, I find that the defendant has not discharged its burden of proof *vis-à-vis* its counterclaim. Accordingly, the defendant's counterclaim must fail.

## **Conclusion**

110 To summarise, I have made the following findings:

- (a) That the Plaintiff's Contract evidenced the final agreement between the parties.
- (b) That the treated area method applies to quantify the plaintiff's work.
- (c) That there is no evidence supporting the plaintiff's case in estoppel *vis-à-vis* the 5.77% deduction.

111 Accordingly, the plaintiff's claim fails. That said, due to the evidential shortcomings in relation to the defendant's counterclaim, I am also of the view that the counterclaim must fail. Both claim and counterclaim in this suit are therefore dismissed.

112 I will hear counsel on the question of costs.