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#### IN THE PRIVY COUNCIL

No. 48 of 1959

ON APPEAL

FROM THE COURT OF APPEAL FOR EASTERN AFRICA

AT NAIROBI

BETWEEN

ATA UL HAQ

Appellant

- and -

CITY COUNCIL OF NAIROBI

Respondent

RECORD OF PROCEEDINGS
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### EVIDENCE FOR THE CITY COUNCIL OF NAIROBI

No. 14

### EVIDENCE OF ROHALD PREDERICK MOULD

4th July, 1957 2.30 p.m.

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RONALD BREDERICK HOULD (Affirmed)

### Examination-in-Chief by MR. SCHERMBRUCKER.

- Q. What is your full name? A. Ronald Frederick Mould.
- Q. What are your qualifications, Mr. Mould?
  A. Associate of the Royal Institute of Architects,
  Associate Member of the Town Planning Institute,
  holder of the Diploma in Regional Planning, Fellow
  of the Royal Geographical Society.
  - Q. What is your present employment? A. My present employment is with the County Council of Nairobi, I am the County Planning Officer.
- Q. Prior to that what were you doing? A. Prior to that I was employed by the City Council from August, 1954, as Assistant Architect from that period to June, 1955, when I became Acting African Housing Architect.
  - Q. Did you have anything to do with Ofafa Township? Part B? A. Yes.
  - Q. How did you first come to deal with Part B. What was the condition of it? A. My first experience of Ofafa Estate, Part B, was on the 14th March, 1955. I was assigned to look after this contract. I went to the site on 14th March, 1955 and was introduced to Mr. Ata-ul-Haq by Mr. Stone, the Clerk of Works.
  - Q. What did you do there? Had anything been done? A. The works were about 80 per cent complete. It does not mean to say that building was 80 per cent complete. The contract was 80 per cent complete.
  - Q. How many blocks did the contract comprise? A. 17, 29, 35, 38A and B.
- Q. Which of these blocks did you first deal with?
  A. I dealt first with Blocks 25, 26 and 27. They
  had reached a stage of about 98 per cent completion.

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Examination.

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Examination - continued. Q. What did you do on these blocks? A. What I was expected to do. I was briefed a very brief brief before I went to Ofafa. The point was emphasised that the housing was needed urgently due to the pressure of African needs for housing and that these blocks were almost ready to be taken over by the City Council from the contractor. I inspected these three blocks on the morning of 14th March. I found the work rough. There were many defects. Particularly in the hanging of tiles. Many of the floors were showing signs of cracking and there were many standard miscellaneous items connected with the finish of the buildings which I considered rough. Poor workmanship and often poor materials. From this inspection a list of defects was compiled. The contractor was given about three days to remedy the work.

Q. Did he do them? A. Yes. He did it to two of the blocks at the time. The third block took a little more persuasion.

Q. Were these blocks eventually taken over? A. They were taken over. Yes.

- Q. Do you remember which were the next blocks you had to deal with? A. Blocks 35 and 36.
- Q. Were these in their turn taken over? A. Yes.
- Q. What did you deal with after that? A. After that we came on to blocks 31/32/33/34. blocks were inspected. They were not approved for taking over by myself, but unfortunately they were occupied by the City Council. This was a mistake.

- Q. Were they treated as taken over? A. Ultimately we were embarrassed into accepting them having occupied them.
- Q. Were any defects to be attended to on these A. There were defects to be attended to on these blocks 35 and 36, and the later four blocks.
- Q. And who attended to this? A. Mr. Stone.
- Q. I mean on the contractor's side? A. The contractor.
- Q. What was your next experience on Part B?

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A. The next experience, it was an experience all the time I can assure you, was really to come on to Block 30. I was rather surprised to find that I could kick the concrete up with my heels. I had a lock at Block 38 and found that Block 38, which was at the time somewhere about 80 per cent complete, the floor concrete had been laid but the screed had yet to be laid and I found there in many places I could kick the concrete up with my heels.

- Q. That was in Block 38? A. 38 is a particularly good eye-opener because the bagwipe had not been applied to the walls and one could see how rough the stone-work was, how wide the joints were and how appalling the mortar was, to be concealed later. To go all through these defects I could run right through all the specification and I should take 2 hours.
- Q. You say you kicked the concrete away under your foot. Were there any other major items? A. I considered in fact I have already mentioned it. That is the mortar in the walls was so poor and that the joints were so wide.
  - Q. How did you find out that the mortar in the walls was so poor? A. One could assess that it is not up to standard. But to find out exactly what content it was it was sent to the P.W.D. for analysis.
- Q. You came upon Block 38 and found some concrete could be kicked up with your heels, the mortar was poor, anything else? A. The stone dressing was bad.
  - Q. The joints? A. The joints were excessive in size. The timber at this time was a point that I noticed. In the specification it asked for standard podo well seasoned. It also asked for it to be site seasoned.
  - Q. What did you notice about it? A. I noticed that the timber was not what we call seasoned timber. It was about .....
- 40 Q. How did you notice that? A. The timber is what we call green. It has an excessive moisture content. Seasoned timber should be somewhere between a 15 per cent moisture content. It is only by experience that one could have an idea. I would not say I was an expert but I know green timber when I see it.

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Examination - continued.

- Q. You get the impression it was green? A. It was green.
- Q. Did you test any of this mortar in any way? A. I was able to rake it out with a knife.
- Q. How did it come out? A. A lot of it flowed out like sand from an eggtimer.
- Q. Did you take any action as a result of this discovery? A. Yes.
- Q. What did you do? A. Before I tell you exactly what action I did take I would like to make it clear I was just not doing it with this contract. I was doing it with other contracts as well. So there wasn't a consistent inspectaon at that time. However, I took a note of the defective mortar and other things I had noticed and a report was made on Part B on 19th May.

JUDGE: You made a report? A. Yes.

- MR. SCHERMBHUCKER: To whom? A. It would have gone ....
- Q. Is that report on your file? A. It is on the file. I think it is addressed to the Acting City Engineer.
- Q. Have you got any notes which you made on the spot at the time? A. That was typed out from notes I made.
- Q. Who typed it out? A. Someone on the staff.
- Q. Was it done immediately? A. It was done within a day.
- Q. We don't want any of the contents of the report.

  Perhaps the witness could look at the file. Who 30 did that report go to? A. The Acting City Engineer, Mr. Saunders.
- Q. Confining yourself to Part B, what followed then? A. A detailed investigation of a more concentrated form was about to commence just after this period and it was left in the hands of Mr. Tanner. I was sent out to Uganda on Council official business for about a week. I am aware that we call them inspection holes to enable Council officials to inspect the work below ground.

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- Q. What was done about the inspection holes?
  A. After my return from Ugenda I went to the site with Mr. Tanner. We had a look at the holes together and we found in most places that where we inspected the mortar in the joints in the walling below ground that it was generally well below standard.
- Q. What sort of inspection was that? A. It was a visual inspection.
- 10 Q. Did you pull any of the mortar out? A. Yes, we dug into the mortar joints with a knife and we found a similar type of weak mortar as we had already found.
  - Q. We were able in places to see the foundation concrete and it was not satisfactory and we drew from the conclusion of our inspection that we would have to have a more detailed inspection of foundation work.
- Q. How many test holes were there at this particular stage? A. The best I can remember I think there were about 12.
  - Q. Did you have a further inspection. Did you have .... Before we go on to that. When you and Mr. Tanner were looking at these inspection holes, was the contractor present? A. I think he was.
- Q. You had a subsequent inspection. What did that amount to? A. There were seven inspections, there was so much to inspect. In July the contractor and the Council compromised on opening up more trial holes. The former ones had been back filled, filled in again. We did compromise with the contractor to have more inspection holes opened. It was a dual purpose. He was disputing the depth of stone courses in the foundations recorded by Mr. Stone. The other purpose was for Council officials to inspect the foundation work and the mortar in the walling.
  - Q. How many inspection holes were there on this occasion? A. To the best of my memory there were 12 inspection holes.
    - Q. Where were they? Were they located in one place or scattered about? A. They were scattered about.
    - Q. Who selected the positioning of them? A. Mr. Haq selected the positioning of them.

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Examination - continued.

- Q. When they had been dug what happened? A. I went down to inspect these inspection holes and brought with me an assistant architect, Mr. Thomas, and Mr. Goodwin, the Clerk of Works at that time.
- Q. Had he by this time taken over from Mr. Stone? A. Yes, Mr. Goodwin took over about the 1st June, not before.
- Q. You and Mr. Thomas and Mr. Goodwin was the contractor there? A. The contractor was present and we took samples in the contractor's presence of the mortar. The bags were sealed in his presence.

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- Q. Do you remember roughly how many there were?
  A. I was under the impression that there were 12.
  I think six were taken one day and I am not sure whether the other six were taken in the afternoon or the next day. It was something in that order.
- Q. Was that mortar only? A. Mortar only yes.
- Q. And did you eventually see the test results of these samples? A. Eventually I did see the test results of these samples.
- Q. Would you look at Exhibit 'C'. There is a letter dated 11th August, 1955. A. Yes. These are the test results of the samples.
- Q. When these tests were taken you said you put them into bags. What was the procedure followed? A. The date, identification number, location of room, were all put on the bag, my signature, the signature of Mr. Thomas, and the signature of Mr. Goodwin put on the bags. I asked Mr. Ata-ul-Haq to put his signature to them as well and he refused.
- Q. Did he give any reason for refusing? A. He gave no reason, he just refused.
- Q. Who took the samples away? A. Mr. Goodwin took them to the P.W.D. testing laboratories. Here again I would add that Mr. Ata-ul Haq was asked to go with Mr. Goodwin and he refused.
- Q. This was the second lot of inspection holes was it? A. The first at which samples were taken for chemical analysis.
- Q. They were different from the first lot of holes? A. Yes.

Q. Was the contractor present on both days when the samples were taken? A. No, Sir, the contractor's son, known as Kaka, was present when the second batch of samples were taken.

JUDGE: The second half-dozen? A. Yes.

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MR. SCHERIBRUCKER: Did he take any part in the taking of the samples? A. He stood around and watched us taking the mortar out but here again his attitude was the same as his father's. He refused to sign the sample bags or accompany the Council official to the P.W.D. laboratories.

- Q. What was the next step in the procedure at Part B after these samples were taken? A. These samples were taken in July and I trust I have got the sequence right Sir, I am going from memory. Somewhere about this time a detailed inspection of blocks 37, 38, 38A, 38B and 39 was to be made.
- Q. And did the inspection take place? A. I made arrangements for that inspection to take place on 20 a Monday. I went down on a Monday and informed Mr. Goodwin that I would be down later in the week. about Thursday, to inspect these blocks and would he please go through and attend to any defects, and see if there was anything radically wrong. ask him to inspect the floors in particular and to let me know. I arrived at the site on that Thursday, late July, in the company of Mr. Ross-White, who is the Building Works Superintendent with the City Council, and it is his responsibility to look after 30 the maintenance of buildings once the council accepts them from a contractor. The purpose he was going down for was to see what he might inherit.
  - Q. What form did the inspection take? A. The inspection didn't go very far. It started in Block 38A and found that the work was considerably more defective than I had anticipated, in particular the floors, and the same in 38B. Going through Blocks 38A and 38B I picked on one in five and found the standard was consistently low. I refused to accept these buildings on that inspection.
  - Q. Did you ever accept these buildings? A. They have never been accepted to this day officially by the Council.
  - Q. Do you know whether Mr. Goodwin made a statement concerning them? A. Mr. Goodwin issued a typed certificate certificate is the contractor's word,

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Examination - continued.

I do not consider it a certificate, it is a site memo. This was passed to Mr. Ata-ul-Haq and the contents were to the effect that Mr. Goodwin approved.

- Q. We have got it. A. Oh, you have?
- Q. When did you see that. Was it at the time, later or what? A. To the best of my memory it was not shown me by Mr. Goodwin, it was shown me by Mr. Ata-ul-Haq when I told him I wasn't going to accept these buildings.

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- Q. What was your response to him when he showed it to you? A. I told Mr. Haq that it wasn't official. My real response came when I saw Mr. Goodwin.
- Q. Was Mr. Goodwin authorised to give him that? A. Mr. Goodwin is not authorised. He has not the authority to issue a memo or the certificate.
- Q. What happened next? You were never satisfied. Did anything take place on that? A. The matter was reported officially to the Acting City Engineer and it was agreed that there was dissatisfaction at the time on all three contracts, A, B and C, and that we would make a more detailed inspection of all three contracts. This took place about the first week of August.

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- Q. Confine yourself to Part B. A. Part B. The inspection was made by a team led by myself, Mr. Goodwin as Clerk of Works, and various technical members of the City Engineer's staff.
- Q. Was the contractor there? A. The contractor was present, having been notified that the inspection was about to take place.

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- Q. What took place at the inspection? A. The inspection commenced from Block 25. We had done very little work on Block 25 when the contractor was joined by the contractor of Part C. A mutual objection was made to me. However, I informed the contractor that the inspection was going to take place anyway. The contractor left the site.
- Q. Did the inspection proceed? A. The inspection proceeded and lasted about three days.
- Q. Did the contractor come back Juring those three days? A. He came back the afternoon of the first day that he made his protest. I didn't see him myself, but Mr. Goodwin said that he had.

Q. Never mind what Mr. Goodwin said.

MR. O'DONOVAN: I have no objection if Mr.Goodwin is being called.

MR. SCHERMBRUCKER: Do you know whether the contractor was back on the site or not? A. I did not see him myself. I was only told.

- O. You did not see him? A. I did not see him.
- Q. What was the result of the inspection over the 3 days? The result was that we compiled a graphical report. We classified all work that we looked at into "acceptable", about three grades of "in between" and two grades of "really bad".
  - Q. Did you convey anything to the contractor as a result of it? A. I am sure that the contractor was informed that we considered the work not satisfactory. I don't think we gave it to him in complete detail at the time.
- Q. Did you ever turn the contractor off the site in Part B? A. The contractor was not turned off the site at that time. In fact he was given every opportunity during the course of protracted negotiation to come back and complete the works to our satisfaction.
  - Q. Did he ever do that? A. The contractor didn't ever do that, and it was not until November that a letter was written to the contractor giving him a definite date to complete the work as requested. Failing that we would invoke I think it is Clause 23 of the Council's conditions.
- 30 Q. Was 23 ever invoked, in fact? A. Yes.

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- Q. Did anything result from that? A. Could you please enlarge on that?
- Q. Well, you know 23, don't you? A. I am familiar with Clause 23.
- Q. As far as you know, were any figures worked out on 23? A. He didn't say.

JUDGE: The record I have is that it was intended.

MR. SCHERMBRUCKER: How was it intended? A. I am rather a technical person. As I see it, the date expired ...

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Examination - continued.

JUDGE: What was done?

MR. SCHERMBRUCKER: What was done apart from writing the letter? A. I must be very woolly. The Council Direct Labour Committee entered the site and completed the works.

- Q. And while that direct labour was working, did you see it from time to time? A. I inspected the site at least once a week.
- Q. Did you ever see the Plaintiff back there while that was happening? A. Yes.

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Q. What was he there for ? A. He was making an inspection of the work that the City Council were doing. In my opinion he was breaching the contract under Clause 23, Part 3.

- Q. He was just watching. Did he ask to go on with the job? A. Not to my knowledge.
- Q. Did you see him on any occasion when he was doing anything more than watching? A. I can recall nothing myself. He brought out a bevel (?) with him to inspect the work.

Q. Did there come a time when he removed his plant from the site? A. He removed his plant from the site during the inspection early in August.

- Q. Was that the three-day inspection? A. Yes.
- Q. Did he move his plant entirely then? A. He moved all that I saw away all that was on the site.
- Q. Were you able to gather at the time whether he was intending to go on doing any more work, or whether he was finished with it. A. At the time he removed his plant the impression conveyed to me was that he had finished the contract.
- Q. Did you make any enquiry of the contractor as to whether he would like to deal with each block separately or put the lot together and have one maintenance order for the lot? A. Ar. approach was made to that effect.
- Q. Did he ever make any election to you? A. He made it quite clear that he would prefer to do the maintenance work on a time basis of six months in acceptance of the last block taken over of the contract.

Q. After this three-day inspection at the beginning of August when the contractor moved his plant, did you have any further personal dealings with the contractor concerning this contract?

A. There were several negotiations with the contractor, in particular when he was summoned to the Town Hall to discuss the matter with the Mayor.

Q.When was that? A. September, about the first week in September, 1955.

- 10 Q. Was the Council still working on Part B at that time? A. The Council had not commenced work on Part B at that time. The Council commenced on the 28th November, 1955.
  - Q. What was the object of the meeting with the Mayor and what was the result? A. To see whether the Council could come to some agreement with the contractor to complete the works to our, or, as it says in the contract, the City Engineer's satisfaction. The first meeting really didn't go down to any material discussion.

JUDGE: You were present, were you? A. I was present.

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MR. SCHERMBRUCKER: The second one - what happened then? A. To the best of my memory there was very little discussed at the second one. It was mainly a plea on behalf of the Mayor that we should try and resolve our differences and the contractor should complete the work to our satisfaction.

- Q. Was anything done in pursuance of that plea?
  A. The contractor, Mr. Ata ul Haq, his brother, Mr. Abdul Haq, the Chairman of the City Council Works Committee, Mr. Singh Natharoo, the City Engineer, Mr. Salmon and myself went down to the site, the same day as we met the Mayor at the second meeting, and the remedial work that was required to be done was pointed out to the contractor.
  - O. How long after the first meeting was the second meeting? A. About 8 days.
- Q. How long were you down on the site on this occasion? A. About 1½ hours and there was partial agreement, only verbal. The contractor was willing to do some of the work we asked. We did not reach complete agreement at this meeting.

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Examination - continued. Q. Can you tell his Lordship what the remedial work required was in general terms?

MR. O'DONOVAN: This is all entirely new to me, My Lord.

MR. SCHERMBRUCKER: Can you tell his Lordship in general terms what the requirements were? general requirements were that the contractor should rake out the defective mortar, considered defective that is by Council officials, and replace it with a mortar to a standard that was originally asked for in the specification.

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Q. Where was this raking out to be done? the external walls above and below ground on all blocks - Blocks 25 - 39. I feel sure that we also at that time requested that he should attend to defective bagwiping internally, including the chimney stacks and the weathering to the capping of the chimney stacks. He should also attend to defective floors, cracks mainly in the screed, and ill found to be right through the concrete to attend to that as well.

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- Q. What was the result of that request? A. Nothing.
- Q. Did you get an answer of any cert? A. We must have had answers of some sort. I cannot remember them all in detail.
- Q. On the spot? A. On the spot it was verbal. The contractor agreed to do certain amounts of the work. I think we disagreed over what he would rake out and repoint at the Council's discretion.

- Q. Did he ever do any work? A. He never did any work at all.
- Q. Did he give any reason for not doing what he had agreed to do? A. Not at the time.
- Q. Ever? A. Ultimately, in November, about 10th November, negotiations broke down and the contractor notified us that he did not agree to what we were asking of him. Particular emphasis was placed on the fact that we wanted to retain a certain amount of money for a period of more than six months 40 to safeguard ourselves against any expenditure on excessive latent defects.

- Q. Did you have anything further to do with Ata ul Haq regarding this contract after that? A. Only that I saw him on the very odd occasion on the site accompanied by persons unknown to me.
- Q. Was anything discussed or done about this work? A. I am not with you.
- Q. Did you do anything actively with him about this work after the date he made it clear he did not want to do any more work? A. Only inasmuch as we had to answer a considerable number of letters from technical and legal representatives.
- Q. You had correspondence? A. Yes.

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- Q. When you arrived at Part B, were there any blocks where the concrete floor had not yet been laid? A. I don't recall any blocks where the concrete floor had not been laid, but the screed had certainly not been put on top of the concrete floor in several blocks.
- Q. You were on the site yesterday when we saw a hole in the floor? A. Yes.
  - Q. Had you ever seen the hard core filling of any of these blocks before you saw that building?
    A. Before I saw the building yesterday?
  - Q. Yes? A. Yes. I have seen several floors opened up and the back-fill exposed as it was yesterday. Generally I have seen it in a similar condition and in some cases worse.
- Q. At what stage of these proceedings did you see A. I saw the first floor exposed showing this? 30 the backfill during the contractor's time. particularly asked for a floor to be opened up so I could see the back-fill. This was not done and it was a repeat request that we had the floor opened up. It was in Block 39. We opened the floor and found the back-fill was not as required in the specification. The concrete on visual inspection was not good. I saw another floor in Block 38. This was opened up at my request; the contractor had then ceased to work on the site and the direct 40 labour had entered the site, probably the beginning of 1956.
  - Q. Was the contractor present when you saw that? A. No.

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Examination - continued.

- Q. Were there any places where the hard core was exposed where you found it satisfactory? A. No.
- Q. Could you give an opinion from what you saw as to whether that hard core could have been compacted in 6" layers? A. Not in the state it was. It would have to be broken down into smaller pieces because it was being applied as a back-fill in between the walls and foundations.
- Q. Would you go back to the inspection holes for a minute where you took samples of mortar for examination, and could you tell his Lordship precisely the procedure leading up to the taking of these samples. What happened? A. I take it that you refer to the samples .....
- Q. There was only one lot of samples taken by you, or were there others? A. There were more samples taken.
- Q. I mean the samples that were taken to the P.W.D. A. There were more samples taken.
- Q. By you? A. Yes, by me.
- Q. When were the other samples taken by you? A. Some of the other samples must have been taken during the three-day inspection.
- Q. Let us start with the first occasion of taking mortar samples. When you had these inspection holes dug what were the size? A. The holes were approximately 3 ft. wide, that is along the side of the wall and they went down to the foundation concrete. The first one we looked at was on Block 38A. We found that, very much to my surprise, the mortar was hard. I couldn't puncture it with a knife. It was a surprise to me. I was very suspicious about it and I got some labour on the site to widen the hole by about another 2 ft. either side. We found conforming to the profile of the original hole that that was where the good mortar finished. Either side of that we found exceptionally poor mortar. It was possibly this one that came out at 18.2:1. It should have been four parts of sand to one part of cement.

JUDGE: Number which? A. Block 38A.

- MR. SCHERMBRUCKER: Isn't there a number against the sample? A. C/7830.
- Q. That was the first hole you went to? A. That was the first.
- Q. How many samples did you take from that?

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A. From that hole?

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- Q. Yes. A. One sample.
- Q. And what position of the hole did you take it from? A. We took it from the left hand, that we had exposed. We did not take it from part of the original hole made by Mr. Ata-ul-Hag.
- Q. What happened at the second hole? A. I cannot remember the sequence of these holes altogether in detail, but of the 12 samples we took within one or two days, we found that in many cases the wall had been repointed with a stronger mortar, and in some cases, in my opinion, where the contractor thought it was reasonably good mortar, it had not been tampered with.
- Q. How many of these holes did you widen or extend? A. I should think about 60 per cent of them.
- Q. Was the comparison consistent or not? A. Inasmuch as you mean that we found good mortar put in by the contractor, or do you mean the mortar that we took for samples.
- Q. In the first hole when you looked at it, the mortar was good. When you extended the hole, it wasn't so good. Was that a general experience or did it only happen a few times? A. A general experience.

JUDCE: You say you enlarged about 60 per cent of them? A. Yes.

JUDGE: You say that the general experience was that the part that was originally exposed had been repointed. A. About 60 per cent of them.

MR. SCHERMBRUCKER: Do you know Mr. McConnell?
A. I know Mr. McConnell now.

- Q. Did you ever meet him on the site, Part B? A. Yes. It was arranged that I should go down and make an inspection of Part B with Mr. McConnell and Mr. Ata ul Haq.
- Q. Did you do so? What took place?

JUDGE: When was this? A. I should say it was in late November or may be early December, 1955. I am not sure. I would not like to commit myself.

JUDGE: Late 1955? A. To the best of my memory.

Q. What took place on this occasion? A. We had had some complaints made by the contractor that we

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Examination - continued.

were raking out unnecessarily, that we were damaging the stone-work, that we were using crow-bars for raking out, and the idea was that we should both go and discuss the matter on the site. It wasn't a very successful meeting.

- Q. Did you go round and examine any buildings in detail? A. Not in detail. There was not enough time. We spent about  $l^{\frac{1}{2}}$  hours on Part B.
- Q. Did you look at some buildings or one building?
  A. We went to Block 25 and we looked at practically every block through to Block 39. I don't recall going inside any of the blocks. We merely walked round the outside. We possibly went into 38A or B.

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- Q. Did you have any discussion as to the workmanship? A. Constant discussion on the workmanship. It was my opinion that the work was bad. Mr. McConnell would not commit himself and say whether it was bad or good. It was just that he had got certificates that they had been approved.
- Q. Did you point out any parts of the work to him yourself? A. I was constantly pointing out bad mortar, cracked floors.
- Q. Did he indicate his opinion? A. He wouldn't acknowledge that there was any bad work there at all.
- Q. Did he show you any work that he thought was good? A. I cannot recall that he showed me any work that was good. I would have been pleased if he had, and surprised.
- Q. How long is it since these buildings were completed? A. There are 17 buildings. Which ones?
- Q. Since the last ones were completed? A. In my opinion they have never been completed. In the contractor's opinion they were completed in July, 1955.
- Q. Hasn't the Council completed them since?
  A. The Council has not completed them and has never claimed that they have been completed. They claim they have done partial remedial work to give them minimum habitableness.
- Q. Going back to the hard core fill under the floor which we saw exposed yesterday. Can you give his Lordship your opinion as to what the effect of that

might be? A. Yes. The back-fill, the very purpose of it, is that it should be as asked for. consolidated into a solid mass. This was not so. In my opinion, it has more or less been thrown into the space between the walls of the foundations with no attempt to consolidate it, but these rocks are in an irregular form resting on top of each other and are going to settle through possibly weathering and the water, a certain amount of vibration is transmitted through the floor. The effects will be gradual but ultimately it must compact more and then it would not support the floor. That concrete we saw was not a good concrete and it is quite possible, in fact it is bound to happen in time, that many of these floors that we saw of that character yesterday, must break. It could happen in 2 or 3 years. It may take 10 years, but it is going to happen.

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O. Bearing in mind that the superstructure of these buildings is not excessively heavy, could you make any estimate of the probable life of these buildings? A. They may last 20 years. I should think after that period they won't be able to call themselves dwellinghouses, they will become slum dwellings, and from the period of going back even to July, 1955 until 20 years from that date, to keep these buildings in anything like habitable condition you are going to have to spend more than what is normally expected in maintenance. Considerably more.

O. Without going into full detail, could you give us the major factors contributing to that opinion? It really comes out basically with the foundations. I didn't realise how bad the foundations were until about February or March, 1956, when about 50 trial holes were dug for the purpose of inspecting the foundation walling, foundation concrete and foundation structure upon which the building stood. In most cases we found that the site had not been cleared to what was asked for. That was down to hard rock or murram. That the site had not been levelled as asked to receive the foundation concrete. That in many cases a soft decomposed stone was left in situ and in many cases pockets of black cotton soil. That the first part of the building to be applied to the ground, the concrete foundations, were in 90 per cent of the cases inspected grossly inadequate. By inadequate I mean that they did not conform to the size, dimension of the drawings. In most cases we found

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the concrete to be of poor quality. The next thing is the foundation walling, which stands upon the concrete foundations. The stone was poorly dressed, the joints both vertical and horizontal, particularly the vertical joints, were excessively wide in many cases, and that even these vertical joints were filled only on the outer face of the stone, a void existing in between. Rarely did we find decent mortar. Again, the next thing to be applied between these walls below the floor slab, is the hard core fill, to which I have already referred. This does not conform to specification. Also, of course, the contractor is probably saving about 20 per cent of his back-fill by putting it in loosely and not compacting it.

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Q. Were you able to see in any places the positioning of the foundation wall on the concrete under-A. Yes, in about 50 cases I was able to see it. I didn't observe it from the ground. got down into the hole. In many cases - the concrete foundations should have been 13" wide. wall is 6" wide, the wall should be built symetrically over that foundation to give a 6" lap either side. In many cases we found that there was a matter of 1", or 2" or 3", rarely did we find it to be 6", and rarely ever out of all those 50 or 54 trial holes if there were 4 then it was the most I saw that probably conformed anywhere near to the specification. Most of them were 2" - 3" thick. Many I saw were only about 1" thick, and there were many amongst these which had foundation concrete which could be pulled out by hand.

- Q. What would be the practical effect of not having a 6" overlapping side of the foundation wall? A. That is what is known as eccentric loading, and the tendency for the wall, it would be a gradual tendency, must be a side slip if you have got eccentric loading.
- Q. You have been there quite often and we have been there yesterday. It has been suggested that by now there should be big cracks in the wall? A. I can assure you that there have been cracks in these walls. They will re-appear and ru-appear worse during each dry season until ultimately, and this will happen, they will become permanent wide cracks.
- Q. When do cracks show up most noticeably, in the wet or dry weather? A. In the dry weather.
- Q. Can you explain why that is? A. It is like all things. When they dry out things tend to

contract. The ground itself contracts. A lot of that weak mixture in the walls tends to contract. There is a general loosening up throughout, and a natural repose to gravity.

Q. What is the effect of the wet weather?
A. Generally, the effect of the weather is for black cotton soil to swell. It exerts a pressure both vertically and horizontally against the buildings. Also the water does get into the building and also finds its way into the joints from under the ground, and of course during the wet weather also it enters the building by rain penetration, all these contribute to a swelling of the joints.

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- Q. There were window ledges outside which had a sort of cement covering. How should they have been? A. I think they should have been properly weathered by cutting the stone. These have been weathered by painting with cement mortaring.
- Q. Can you call weathering, can you call that chamfering? A. Well, it is not a good term, but you could call it chamfering.
  - Q. What does chamfering mean? A. Chamfering is to form a splay off.
  - Q. Can you explain that? How do you do it? If a builder is going to chamfer, what does he do? A. It can be done by a form of stone dressing. Chisel it.
  - Q. What is the object of it? A. The object of it is to throw off the water.
- 30 Q. Is it a good or bad thing to put cement up against wood? A. It is not good practice.
  - Q. Why not? A. The water is bound to get between the timber and the applied mortar and what is known as break the key.
  - Q. On this specification, do you agree that it is a compliance with the specification to put a cement plaster on at an angle instead of chiselling the stone. No. 27 on page 7. What I want to know is whether creating a window lintel with a cement covering as we saw was a compliance with the specification in your opinion? A. Well, it is not good building practice.
  - Q. Is it compliance with that specification?
    A. This specification is not very clear here.

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JUDGE: Is there anywhere in the plans where it is detailed? A. I was looking for that, I cannot find it.

MR. SCHWRMBRUCKER: Are you in a position to express an opinion generally as to the comparison, if there is one in these buildings, between what is above ground and what is underground.

JUDGE: As to quality of work?

MR. SCHERMBRUCKER: Yes, above ground as compared with below ground? A. I should say the work is worse, far worse, below ground and far more detrimental to the stability of the buildings. Above ground the work is not good. It has been concealed. It is easy to conceal it.

JUDGE: What has been concealed? A. The defective work above ground.

MR. SCHERMBRUCKER: Can you give any reason for saying that? A. Yes, because like many people who visited the site yesterday for the first time, they don't really appreciate how consistently defective a lot of that work is. If you are going to see how defective it is then you have got to expose it.

Q. Did you do any exposing? A. I did.

Q. Can you give us one or two instances on which A. Prior to the Council you base your opinion? commencing the direct labour work I did in a few places hack away the mortar to get some idea of how wide the joints were and what the mortar was like between the joints. I think the full appreciation came during the period that the Council was raking out the joints on blocks, mainly blocks 38A, B and 39. In many cases as much as 90 per cent of the joints internally were raked out. I doubt if it ever went below 40 per cent of the joints and in many cases we found that in raking the mortar out it fell out of its own accord. We found many joints so wide that you could put your hand through, get your arm through. I think it was in that period that I saw how poor the stone dressing was, how irregular the stones had been laid and how poorly the mortar had been applied.

Q. Can you express a general opinion as to the quality of the screed on the floors of these houses? A. Generally I should say the screeds are up to specification, in fact in cases I should

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say it was better than the specification. I would like to add further that it is not just the fact that the screeds are a mixture of 4:1 when chemically analysed that makes them a good screed. It is how the screed is applied, whether it bonds to the concrete of the sub-floor as to whether it is successful or not.

Q. What was the bonding to the sub-floor like in general? A. In general, poor. To get an effective bond union with that sub-floor you have to clean off completely the side concrete, well wet it, and then apply your screed. If this is done you should get a reasonably good floor surface provided that the floor concrete is good to start with. If it is weak, as we have seen it in many cases, and the contractor puts on his 3:1, the co-efficients are so dissimilar as for the reaction to be non-effective. In other words, a very strong screed not applied efficiently to a weak concrete, is not going to bond with it, and it is going to crack. And there is rarely a place where that hasn't happened.

Q. What sort of a crack would that be to the eye if you looked at it? A. It would look like a hair crack. Then it will enlarge until it becomes a definite crack. It is very difficult to tell whether a crack is the result of shrinkage stresses in the screed or whether it is the result of cracking in the concrete floor below. In fact the best way you can tell is to dig it up.

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Q. Is there a way that you can tell whether in fact the screed is adhering well to the concrete? A. Yes, you can do that by tapping. You get a very solid response, and where it is hollow it is easily identified as a hollow sound.

Q. Can you express an opinion generally as to the nature of the floor concrete in the buildings?

A. Yes, I have seen quite a few of these floors opened and examined quite a lot of the concrete. I wouldn't say that the 1:3:6 mix that was asked for is not there. I should say about 60 per cent of the cases it would be a 1:3:6 mix. But that again does not make a good concrete. If the contractor doesn't mix it properly, doesn't lay it properly, doesn't keep it damp and keep traffic off it until it is set, then it will never be good concrete. I should say in most cases where he has got the right mix it has been spoilt by poor workmanship.

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should say that where I have inspected this concrete that he has not used a good sand. He has used a sand that has a considerable amount of impurity in it. Earth. Earth does not respond to chemical reaction with cement.

- Q. Are there any instances from which you draw that conclusion? A. Yes, I have noticed it. That concrete I looked at yesterday. I should doubt whether that sand was clear as asked for in the specification. You won't find it like lumps of earth but you can tell by practical experience.
- Q. Do you know that a certain amount of work in these buildings were broken up by the Council using some sort of implement. Breaking up all the mortar?

  A. Yes.
- Q. Did you see what instrument they were using?
  A. Yes, the instruments were known as what we call raking out tool. They were made at the City Council specially for this job. It is a steel bar, a 3" steel bar, 18" long, turned at one end, the bottom part being about 3". I think one end was sharpened to a chisel point and the other was sharpened to a point. These tools were used for hacking out the defective mortar.
- Q. Would a crowbar be an appropriate term for these tools? A. No, a crowbar is a completely different tool.
- Q. Do you think it would be possible for you to get hold of one of these tools and bring it with you tomorrow?

JUDGE: Does very much turn on the tool?

MR. MOULD: It would be possible. Perhaps the Town Clerk could get it better than I could.

5th July, 1957 10.30 a.m.

Witness continues evidence on sam outh.

# Examination-in-Chief by MR. SCHERMBRUCKER (Contd.)

Q. Mr. Mould, the tender in this case for Part B was £85,000. Have you gone into the figure aspect of this. Would you be able to say whether that was a high or low quote for the specification?
A. I am given to understand ....

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Q. Have you considered it yourself as an architect?
A. I have considered it. I considered it by comparing prices of buildings at the time the tenders were made. I was not in the country at the time the tenders went out. However, it works out to just over 16/- a square foot. I think that is a reasonable price.

Q. Taking the job as it was when the contractor had done the last work that he did on it. Have you considered the finished job from the point of view of what it was worth?

A. Yes, I don't think that the Council have got value for money.

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Q. Are you in a position .... Can you or can't you .... Can you give his Lordship any idea of what value they did get? A. This is a very difficult question to answer because the way I would look at this is the fact that so much of the work is defective and would have to be remedied.

Q. Have you seen Mr. Wevill's estimate of what would be required to bring it up to standard.
A. I have seen Mr. Wevill's estimate.

Q. Have you had an opportunity of studying his figures? A. I have had the opportunity, but not as long as I would have liked to have.

Q. Are you in a position to say whether you agree with them or not? A. Yes, I go all the way with Ir. Wevill. I would go farther.

Q. Have you worked out any figures on your own?
A. I did. My figures for bringing the scheme up
to specification would have been higher than Mr.
Wevill's.

Q. Can you give us a sum total of what you estimated would be required? A. To be quite honest it is a long time since I did it and there were several contracts I was working on. I believe that I estimated it between £45,000 and £50,000.

## Cross-examination by MR. O'DONOVAN

Q. Do you think all Mr. Wevill's figures are conservative? A. No, not all of Mr. Wevill's figures.

Q. Take one figure. The largest item, floors. "To bring up ...... 310,000/." Would you, to use your own phrase, go all the way with Mr.Wevill on that? A. My Lord, I find it extremely difficult to think in terms of Shillings.

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Crossexamination.

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Crossexamination - continued.

- Q. £1,500. Would your own figure be more than that? A. My own figure was £17,000 for floors.
- Q. I suggest that your figure was £3,750. Do you contradict that? A. I would like to have a look at my own figure.
- Q. I will show it to you in a moment. It would surprise you, would it? A. It does surprise me my memory may be faulty.
- Q. Mr. Mould, when did you come to this country? A. In August, 1954.
- Q. Was this your first job? A. As an architect, yes. My first job in East Africa.
- Q. In fact, your practical experience therefore of East African conditions commenced in March, 1955, when you went on to the site? A. Yes, Sir.
- Q. You had no previous experience of black cotton soil? A. No previous experience at all.
- Q. Do you think you are in a position to contradict Mr. Stone, who has worked in East Africa on buildings for some 40 years? A. I don't think one has to live in East Africa for 40 years to have experience of black cotton soil.
- Q. Is that an answer? A. An indirect answer.
- Q. You say, in your opinion, these buildings have never been completed? A. In my opinion, that is so.
- Q. That means they have never been ready for occupation does it? A.building is not ready for completion until it is completed. The two phrases mean the same? A. My Lord, this question is one that if I was to answer in the knowledge that I had when I first went to the site and the knowledge that I have now, you will have two different answers.
- Q. Give them both? A. When I first went to the site I had taken over from another architect who I trusted had done a satisfactory job. An architect hasn't got X-ray eyes. He cannot see into stonework. He cannot see below floors. He cannot see below foundation walling.

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Q. This is not a speech. This is an answer to my question, is it?

A. An answer to your question. Had I known what I know now, I would say these buildings were not fit for occupation.

JUDGE: Do I understand you to say that you thought they were fit for occupation when you took over, but you have since come to the conclusion that they are not?

A. That is so.

- Q. Does the phrase: "ready for occupation" mean the same thing as "completed"? That is my question. A. The answer to your question is yes.
  - Q. How long did you work for Mr. Tanner before Mr. Tanner left? On the site. A. You say on the site.
  - Q. On the site? A. I didn't work with Mr. Tanner. I think I made two visits with Mr. Tanner to the site.
  - Q. Over what period? A. A period of about 3 months.
- Q. You worked with Mr. Tanner at any rate in relation to this contract for about three months?
  A. I wouldn't like to call it working.
  - Q. How would you describe your activities? A. My activities were such that I was detailed to take over this work, which I did on ......

JUDGE: I think the question refers to the period before that.

- MR. O'DONOVAN: Yes, before Mr. Tanner left. How long were you concerned with this contract?

  A. I answered the question. About 3 months.
  - Q. During that time you made about two visits with Mr. Tanner? A. That is all.
  - Q. I take it that you were aware of your responsibility as an architect when you took over this contract from him? A. I am aware I am responsible, yes.
  - Q. I didn't ask whether you are now. Were you then? A. I was then.
- Q. That is all? A. That is not complete responsibility. I was responsible to Mr. Tanner and the engineer.

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Crossexamination - continued.

- Q. I didn't ask about the extent of your responsibility. I asked whether you were aware of what they were?

  A. The answer is yes.
- Q. And did you carry out your duties under the contract conscientiously? A. I did my best.
- Q. The answer is yes? A. Yes.
- Q. You realised, of course, at the time public monies were involved in this contract? A. I was fully aware.

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- Q. Were you fully aware that you were appointed because of your professional qualifications to ensure that no public money was paid out to the contractor which was not properly due under the contract? Were you aware of that? A. I was aware of that.
- Q. And did you carry out your duties properly in that respect by, that is to say, in relation to issuing payment certificates? A. Every payment certificate that I ......
- Q. Could you answer that 'Yes' or 'no'? I think you can. A. I don't think I can answer it 'Yes' or 'No'.
- Q. I will repeat the question to you. Did you conscientiously carry out your duties under the contract in regard to your issue of payment certificates. You either did or did not, surely?

  A. There is a little more to it and I cannot answer it a straight 'Yes' or 'No'.

JUDGE: You cannot say whether you carried it out conscientiously or not? A. May I enlarge on 30 this in my answer.

JJDGE: No doubt your Counsel will get any explanation later. Cannot you answer the question as put to you? A. I don't think I can with a straight 'Yes' or 'No'.

- MR. O'DONOVAN: You can say 'Yes' or 'No' and then qualify it if you like. A. We will say a mild 'Yes'. Can I qualify it.
- Q. I thought you had? A. I had considerable arguments over the issuing of these certificates. 40 I prepare the certificates. The certificate is not authorised by me.
- Q. Is that your answer? A. That is my answer.

- Q. With whom did you have the arguments? A. My arguments took place with Mr. Tanner who was the architect in charge of African Housing at the time.
- Q. What were you arguing with Mr. Tanner about? A. That I did not consider the work to be up to specification.
- Q. Do you mean to say that you challenged Mr. Tanner on that on the strength of two visits over three months? A. I have been misunderstood. I did not make two visits over a period of three months. I made two visits with Mr. Tanner over a period of three months.
  - Q. Independently you made more visits? A. Yes.
  - Q. Did Mr. Tanner disagree with your standards?
    A. He did not entirely disagree with my view. He put many other views of his own.
  - Q. Did he over-rule you? A. He did over-rule me.
- Q. After he left he ceased to over-rule you?

  20 A. That is true.
  - Q. When did he leave? A. He left on 6th June, 1955.
  - Q. And thereafter did you conscientiously carry out your duties without qualification in regard to the issue of payment certificates? A. I did my best to. I held up the payment certificates in May. I had been instructed to issue them by the then Acting City Engineer, Mr. Saunders in June.
- Q. Is your answer that as from Mr. Tanner's departure you yourself carried out your duties fully to safeguard the public's money before certificates were issued? A. I did, and before Mr. Tanner left as well, by holding up a payment certificate in May.
  - Q. May we take it that you carefully acquainted yourself with the contract at the time with the provisions and the specifications? A. As much as time would permit, yes.
- Q. Did time permit you to do it properly? A. Not as properly as I would have liked.

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Crossexamination - continued. Q. Were there any of the provisions of the contracts or specifications which you have only since discovered? Or were you aware of them all at the material time? A. May I ask a question?

JUDGE: The question was fairly straightforward.

MR. O'DOMOVAN: Have you only subsequently discovered all the conditions and provisions of the contract or did you know all of them? A. I was broadly aware of most of the provisions in the specifications.

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- Q. You can think of no subsequent discoveries? A. At the moment the answer is 'No'.
- Q. Did you go to a lot of trouble to try when Mr. Tanner had left and you were there, to impose your own standards? Did you go to a lot of trouble to try to improve the buildings? A. Most of my efforts to improve the buildings was exerted during Mr. Tanner's time.
- Q. Did you go on trying after he had left?
  A. Yes. I went on trying after he had left. There was very little work done after Mr. Tanner had left.

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- Q. There were quite substantial payment certificates after he left. How do you account for that?
  A. I have already answered that question inasmuch as I was instructed to issue payments certificates that were held up in May.
- Q. Did you go to a lot of trouble after you took over the site in March to improve the standard of the building? A. To make it quite clear. The contract was 80 per cent complete. Some of the buildings were almost 100 per cent complete. My job was not to go over the work that had already been done but to complete the work that had to be done. Where the work was in a state of completion I tried very hard to improve the standard to bring it up to conform with the specification.

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JUDGE: Where the work was still being done? A. Where the work was still being done.

MR. O'DONOVAN: When you took over, two blocks had been accepted by the City Council. Is that not so? A. That is true.

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Q. Two out of 17? A. Yes.

Q. And you were responsible as the architect in regard to the maintenance of these two buildings?
A. Not at all.

Q. Did you think as architect you had no duties in respect of Clause 9(2) with regard to defects which might appear during the maintenance period? A. I have answered you a little incorrectly. I am responsible for listing defects which appear during the maintenance period.

- Q. So you would examine the two accepted blocks during the months after acceptance? A. I would.
  - Q. And did you? A. I did not.

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- Q. Go on. A. Because the maintenance period had not been clearly agreed between the Council and the Contractor. It was later agreed with the contractor, that is, the maintenance period of six months would commence from the taking over of the last block of the contract. It would therefore mean that some blocks would have been accepted and occupied and the maintenance period could run into 10 months. It is customary to do a maintenance inspection towards the end of that six months, and provide the contractor with a list of defects, if any, which you wished put right before the final certificate is issued.
- Q. Is this alleged agreement recorded anywhere? A. I was of the impression that it was recorded.
- Q. I suggest to you, I suggest there is nothing in the City Council files to indicate any such agreement. A. I will have to accept your word.
  - Q. Very well. Will you look at your file during the next adjournment and if you can find it will you produce it?
  - Q. Did you hear Mr. Schermbrucker in his opening address suggest that the maintenance period of these two blocks had expired in about May?
  - MR. SCHERMBRUCKER: He wasn't in court.
  - MR. O'DONOVAM: I am sorry. Did you go round the blocks room by room in your efforts to improve the blocks. A. Not all of them.
    - Q. Did you go room by room through every block which was going to be taken over? Which was

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Crossexamination - continued. approaching the stage where it could be accepted? A. I did.

- Q. Did you make the criticisms in order to get it put right going down to the minutest details. A. As regards the finishes, yes.
- Q. Were lists of defects pointed out to the contractor or given to him in writing? A. They were left by me with the Clerk of Works. Whether he passed them on to the contractor I cannot say.
- Q. The Clerk of Works was deputising for you was he? A. Yes.
- Q. In regard to pointing out defects and seeing they were properly remedied? A. With regard to finishes we are talking about. The answer is yes.
- Q. You were aware, were you not, of your powers under Section 9 (1): "To order the removal .... in accordance with the specification". Do you want to make a long speech and qualify the answer to a simple question? A. The simple answer is...

JUDGE: It is a very simple question. Were you aware of the powers in Clause 9 (1)? A. I was aware of Clause 9 (1).

MR. O'DONOVAN: The answer is 'Yes'? A. The answer is not entirely 'Yes' so far as I am concerned.

JUDGE: You were either aware or not aware of Clause 9(1)? A. I have answered 'Yes' to Clause 9(1).

MR. O'DONOVAN: Did you not use your powers under Clause 9(1) to cause the removal of certain defective materials and the re-execution of certain work, the floors for instance? A. I did exercise my powers in having tiles removed.

- Q. And floors relaid in some cases? A. Yes, ultimately.
- Q. Did you authorise the Clerk of Works to exercise that power for you. I think you said in your Examination-in-Chief: "I told Goodwin to attend to any defects and get them rectified". You deputed to Goodwin your powers under 9(1)? A. May I read Clause 9(1).

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- Q. Do please. (Witness reads) A. I have read it. It refers to the engineer. I am not the engineer.
- Q. You want to start arguing about that.

JUDGE: I don't think your Counsel is disputing that for the purpose of the contract you are the engineer within the meaning of the word? A. I would like to qualify that.

- MR. O'DONOVAN: Presumably the defects, these minute details, which appeared after these room by room inspections were in fact carried out before any particular block were accepted, were they not? A. They were.
  - Q. You personally, Mr. Mould, were responsible for the acceptance of no less than 9 out of the 11 blocks that were accepted. A. That is not true.
  - Q. You recommended to the Council the acceptance of these 9 out of the ll?

    A. I recommended acceptance to the Council of 5.
- 20 Q. Four were due to embarrassment? A. Yes.
  - Q. We will deal with those five that didn't embarrass you? A. I have had many arguments over those and I was overruled by my superiors.
  - Q. Did you recommend to the Council 5 of the 9 blocks? A. Not without protest.
  - Q. Did you put these protests in writing? The answer to that is 'No'. A. It probably is 'No'.
- Q. Would you like to look through this file? If you can see any vestige of protest will you bring it to the notice of His Lordship? What caused your embarrassment with regard to four of the blocks?

  A. The blocks had been occupied on the authority of the Deputy City African Affairs Officer.
  - Q. With the knowledge of the Council? A. Without the knowledge of the Council.
  - Q. When did they come to learn of it? A. Because the African City Council Affairs Officer is part of the Council, so it is within the knowledge of the Council. The architect's knowledge a few days later.

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In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Crossexamination - continued.

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Crossexamination - continued.

- Q. Is there any written expression of your embarrassment on these files? A. I don't think so.
- Q. Is the inference to be drawn that a different standard was applied in recommending the acceptance of the blocks to the Council from that which you now apply when you so whole heartedly condemn all of them. Can you answer that 'Yes' or 'No'? A. Yes.

JUDGE: A different standard is being applied now than was being applied when the blocks were being accepted? A. The answer is yes. I would like to qualify it.

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MR. O'DONOVAN: You can qualify it at a later stage. One of the letters of acceptance is in your own handwriting, Mr. Mould. Would you dispute that? Would you dispute that you drafted the letters of acceptance? A. All assistant architects draft them.

JUDGE: All the letters?

- MR. O'DONOVAN: All of them or some of them?
  A. They draft most of the letters concerned with the contract.
- Q. When you did that you were fully aware of the general character of these buildings. Were you not? A. I was not fully aware of the general character.
- Q. Did you to use your own expression did you require X-ray eyes to see that the window sills had been weathered by cement instead of being chamfered? A. That does not require X-ray eyes.
- Q. I take it that you were prepared to see the Council accept these blocks although the sills had been treated in that way? A. That with many other points are ones that I brought up with regard to things I had seen on these buildings.
- Q. Did you bring it up in writing? A. I should say the answer is 'No'.
- Q. Did you tell the contractor to do otherwise? A. No.
- Q. Did you notice the quality of the mortar used in the external walls? A. Do I have to answer this on a 'Yes' or 'No'?

JUDGE: Perhaps you can qualify this, but don't take too long. A. The walls as completed outside are not completed as asked for in the specification.

MR. O'DONOVAN: And did you notice that? A. I did notice it.

- Q. And you drew up these acceptance certificates notwithstanding? A. This again was one of the cases discussed with Mr. Tammer as to why the walls had been finished off.
- Q. Are you referring to the fact that they are not struck-jointed and Mr. Tanner told you that he directed otherwise?

  A. Yes.
- O. That ends the matter, doesn't it? Or do you think you are entitled to resurrect it now?

  A. I would like to add a piece more. To effect a completion of the joint as it was done is often to point out and then effect a keyed finish.
- Q. Never mind the technical details. Did you notice the quality of the mortar? A. Where I saw it I assumed it was the pointing.
  - Q. Did you notice that the mortar in the external walls was weak or not? A. I never went round.
  - Q. You didn't go round with a sharp instrument?
    A. Not at the time. I did. I made a detailed inspection of a lot of mortar about May before Mr. Tanner had left.
  - Q. About May? A. On Part B.

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- Q. We are only talking about Part B. So that you were well aware of the quality of the mortar before a number of these acceptance certificates were issued? A. No, sir.
  - Q. How do you reconcile your last two answers? You made a detailed inspection in May and the certificates are dated June? A. I was instructed to accept these buildings. It was an embarrassment to me.
- Q. You mean you were embarrassed by nine out of nine? I thought you were only embarrassed by four?

  A. The blocks that were officially accepted in June are blocks 31, 32, 33 and 34, the blocks I held up.

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- Q. What about the other blocks? A. I did not make an inspection of the work carried out by my predecessor in detail. I did not consider it my responsibility.
- Q. You said you made a detailed inspection in May? A. Of finishes in May.
- Q. Of all blocks? A. Most of the blocks.
- Q. I thought you didn't, once the building had been completed, concern yourself with maintenance until the end of the maintenance period?

  A. I didn't say it was maintenance. When I was inspecting these blocks in May I was becoming radically aware that the blocks had not been built to specification and work that had been concealed before my arrival.

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- Q. Do you remember after the trial holes were dug at the end of May. 20 in all. I put it to you that there were 10 dug inside the buildings and 10 outside? A. I don't recall 10 inside. We are talking about May, 1955. They were dug outside.
- Q. At any rate, some of the floors had been taken up and you were well aware of the nature of the hard core filling weren't you before the end of June? Had not some of the floors been taken up on your instructions? And the hard core filling exposed?

  A. I can only recall one floor in Block 39. I instructed Mr. Goodwin to take it up.
- Q. Were you aware of the hard core filling? A. I was aware before the end of June. It was either the end of June or beginning of July.
- Q. You never in your list of defects which you instructed the contractor to do insisted on his replacing the hard core filling with other material? A. At the time these defect lists were made out in respect of the earlier blocks I had not seen the hard core filling.
- Q. You never instructed the contractor after you became aware of the hard core filling to take it out and put something different in its place? Did you or did you not? A. Can it be put this way. I asked my senior, the engineer, to have all the floors taken up and the back fill to be taken ....
- Q. I am not asking you what you asked the engineer to do. Did you ask the builder to replace the hard core filling? A. I was not in a position to....

- Q. Did you or did you not? A. No.
- Q. You knew very well from your inspection of the building that there was no plate as required by the specification on one of the inside walls, did you not?

  A. A wall plate.
- Q. Yes. And that the wall had instead been built up to reach underneath the tiles. You were aware of that?

  A. That there was to be no plate?
- Q. Yes. A. I cannot recall it.
- Q. It is obvious to anybody who gets into any room and to whom it is pointed out? A. That there is no plate?
  - Q. Were you aware that that had been altered? A. I cannot particularly recall it.
  - Q. You were aware of course of the extent to which the internal walls had been finished off, weren't you? A. Yes.
- Q. In fact, did you not go round with Mr. Stone pointing out individual pieces of rock where projecting surfaces had to be chipped off? A. I don't particularly recall it as such in regard to the wall surface so much as where places where the door openings were, particularly where I considered people could catch themselves on those projections.
  - Q. Every criticism you had to make was in fact dealt with, was it not? A. Not everyone, but the majority.
  - Q. Substantially? A. Substantially.
- Q. Where the bag-wipe was not satisfactory you had it redone for instance, didn't you? A. Towards the end of the contract the bagwiping became progressively bad on the later blocks and I did ask for it to be redone. I don't think it was ever redone. I am sure it was never redone.
  - Q. You are sure it was never redone. Do you remember which block 38 is? Is it one of the worst ones? A. One of the worse as regards the finishes. There were improvements made.
- Q. You were looking after three contracts? A. I was looking after two out of three contracts.

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- Q. Were you aware of the quality of the work of all three? A. I beg your pardon. I did ultimately take over the three.
- Q. Was not this particular contract very much the best? A. Not very much the best. He was probably much better than the other two at his finishes.
- Q. Are you sure you haven't got some of your observations mixed up with what you saw on other contracts. A. I was under the impression when I saw the three contracts that Part B was the best.
- Q. I am only asking if in giving evidence you have not possibly been mistaken in your recollections and confused some of the things you saw in the other contractor's site with this particular work? A. There is always a possibility, but I cannot recall anything at the moment.
- Q. We have a record here of some very satisfactory tests of cement by the P.W.D., of samples sent to them by Mr. Goodwin. Did you authorise him to take samples? A. Some samples were taken by me.
- Q. Did you authorise him to do it? A. I authorised him to take samples and some were taken by Mr. Ata-ul-Haq in his presence. I think they took 2 samples.
- Q. Apart from that Mr. Goodwin sent samples to the P.W.D. A. Apart from that he took samples to the P.W.D. and many I myself took.
- Q. The results were satisfactory. At least those produced by Mr. Goodwin were satisfactory. Would you look at the Exhibits? Exhibit 66. That purports to relate to this contract does it not? A. It relates to this contract.
- Q. And it is very satisfactory, isn't it?
  A. There are two sets of test results here. The first set refers to the analysis of concrete in the floor.
- Q. I only asked you whether they were satisfactory or not?
  A. As far as the proportion goes, one is .... both are reasonably satisfactory.
- Q. They deal only with proportions. They are satisfactory? A. Not entirely satisfactory. The first one is satisfactory and the second one is 1:3:6 to 6.2.

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- Q. Does that satisfy you? A. It is less than what we asked for so it is not really satisfactory.
- Q. Oh, come: On the whole, are they satisfactory? A. I would accept these mixes.
- Q. How is it that there is no reference to that satisfactory test in the City Council Enquiry. You concentrated on the bad analyses. A. All these tests were taken over to the public Enquiry. The advocates had access to them. The fact that I was not asked to comment on any of these particular ones is no business of mine.
- Q. And so you refrained from commenting?

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JTDGE: I don't know that this witness could give the why and wherefore of why it wasn't produced. A. All these documents were taken over and I was prepared to comment on any of them.

MR. O'DONOVAM: It was not produced to you. You didn't mention that? A. I don't recall that.

- Q. Of course you don't recall. What about your other tests which you sent. Where are the results of them. Can you produce them or can't you?

  A. I have seen the originals of these copies at the City Council. I was under the impression that we had found most of them.
  - Q. You have only produced two bad ones? Where are the test results? A. This is external correspondence. Kept in the registry.
- Q. So there would be a registry record of the tests of the other samples which you sent? A. They should be included on the registry files.
  - Q. How many samples do you think you sent on how many occasions. There must have been quite a number relating to this contract? When the Council examined the site did you pull off one piece of mortar and make the observation that it was a particularly bad piece of mortar? A. I am not sure whether I did pull it off.
  - Q. Did you make the observation that it was particularly bad? A. On being asked, I said I thought it was 1:8 but it was 1:3.
  - Q. It turned out to be better than the specification? You were challenged by the contractor and proved to be wrong?

    A. Not entirely.

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Crossexamination - continued. Q. You were proved to be wrong in regard to the proportions anyway? A. Not entirely. I know you think .....

JUDGE: You said that it was a 1:8 mix? A. Yes.

JUDGE: And it turned out to be a much stronger mix? A. Yes. but I can explain that.

JUDGE: Your Counsel in re-examination will give you every opportunity to explain.

MR. O'DONOVAM: Did you not on 19th May, 1955 report to the City Council that your aim was to raise the standard of work and to concentrate on getting the contracts completed as quickly as possible?
A. Yes.

- Q. Did you say on that same date that there was one unit on which the floor had not been laid where the hard core was exposed? A. That was Part A.
- Q. Your report doesn't say whether it was Part A or B. Do you mix them up? A. I deal generally.
- Q. You deal generally. Did you comment that the Plaintiff's work in this case was generally of a better standard? A. It is quite possible that I did.

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- Q. Would you like to see what you said? You say: "He is argumentative, but his work is of a better standard". Is it a correct statement of fact?

  A. I hope I have made it clear that everything is qualified by time?
- Q. You have made it quite clear that everything you say is qualified. You knew that Mr. Tanner had given a great many verbal instructions? A. Yes.
- Q. Many of which should have been in writing, strictly speaking? A. Yes.
- Q. You continued giving a number of verbal instructions yourself? A. It is quite possible.
- Q. Did you on the 5th July write this note yourself in your own handwriting. Did you write to the Engineer, City Council: "I should be .... ready for occupation". Do you want to qualify an answer to a question whether this is your handwriting? A. That is my handwriting. This is an internal memo and not an official letter.

Q. Is there some lesser standard of truthfulness in internal memos? With regard to extras. I will refer you to a note. Did not Mr. Goodwin on your instructions start measuring extras in respect of which verbal orders had been given? A. Whose verbal orders?

Q. Mr. Tanner's. A. I asked Mr. Goodwin to measure quite a considerable amount of things.

Q. Did Mr. Goodwin inform you that the contractor told him that he was told to get on with the work, that he could not produce to you the orders in writing because he was unable to get them, and did he further add that the contractor was much more satisfied now that he had seen the work measured in Mr. Goodwin's book as the contractor was under the impression that he was going to be denied these extras? A. Yes.

MR. SCHERMERUCKER: Is that evidence?

MR. O'DONOVAN: You arranged with Mr. Goodwin to measure extras which had been verbally ordered by Mr. Tanner? A. Yes.

- Q. And did you agree with the Plaintiff that he was not to be denied these extras simply because the promised variation order had not been produced?

  A. He gave the understanding that they would be considered justly.
- Q. They would be justly considered. They would be honourably considered?

JUDGE: This was to whom? A. The contractor.

MR.O'DONOWAN: Did you occasionally receive typewritten memos from Mr. Goodwin? A. Yes, Sir, very occasionally.

- Q. Is this one of them, dated 8th July? A. I re-
- Q. Does it set out with confirmation that certain extras were ordered verbally?

MR. SCHERIBRUCKER: If the memo is admissible, cannot we have the memo?

JUDGE: Is this the one we talked about previously?

40 MR. SCHERMERUCKER: If it is a memo that the witmess received at the time, then it is a simple matter. In the Supreme Court of Kenya

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Crossexamination - continued. JUDGE: I think you had better leave the whole of this memo.

- MR. O'DONOVAN: Did you, in fact, agree that his claim for extras would not be prejudiced by the absence of a written variation order? Is that not a fact that you said that they would be justly dealt with?

  A. Yes. Sir.
- Q. In fact, did you not agree that it would be dishonourable and discreditable of the City Council to try to slide out of an obligation to pay for extras where they had promised a variation order in writing and then not given it?

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JUDGE: Does that matter?

- MR. O'DONOVAN: No, My Lord. Just a matter for comment. Did you hold up payment certificates ll and 12 as a precautionary measure because of an enquiry on African housing on this estate? Would you like to read a letter in your handwriting which I have more or less quoted? A. Yes.
- Q. And when the contractor complained about the delay in giving him letters of acceptance, did you then reply that that was the Council's responsibility and didn't prejudice him in any way? A. May I have a look at the letter?
- Q. The answer is yes, is it not? A. You are talking about payment certificates. These don't refer to payment certificates.
- Q. When the contractor complained about delays in getting letters of acceptance, did you reply to that effect? A. Yes:
- Q. In effect it didn't prejudice him. That is Exhibit 42. In fact, the delay in taking over the blocks would prejudice him, would it not? It would extend the maintenance period. It would automatically, wouldn't it? If the maintenance period started from the date of acceptance? A. Are you referring to my liability here?
- Q. Yes. A. We are talking about different terms.
- Q. In effect it would extend the maintenance period and therefore increase his liability, would it not? A. In the way you are putting it, that is correct.

- Q. Very well, we will leave it. Was Block 37 as bad as 38? 38 was one of the worst so far as finishes were concerned? A. I cannot recall at the moment, Sir.
- Q. Is this in your hand-writing? "A site report ..... generally reasonable"? A. Yes, an architect's opinion of what is generally reasonable would probably be very different to your own.
- Q. Were you expressing a genuine opinion as an architect whether or not it differed from my own? (Exhibit 68). A. I expressed it there.
  - Q. Was it honest? A. It was honest.
  - Q. The second lot of trial holes were dug you said in July. There were only two lots of trial holes dug by the contractor were there not? A. Two lots dug by the contractor.
  - Q. Your written authority for the work was somewhere at the beginning of July, but in fact it began some days before. I suggest to you that the second lot commenced to be dug at the end of June? A. May I see the authority?
    - Q. Mr. Goodwin informed you on the 27th June that Mr. Ata ul Haq, to use his expression: "Went right up in the air when he saw that there were some buildings marked '3 courses' ...... He wants to do the rest tomorrow". Do you agree having regard to that?
    - MR. SCHERMBRUCKER: This is Mr. Goodwin giving evidence through Mr. Mould as to what happened.
- JUDGE: Yes, but is that not a clear admission. There is no question of anything said by the contractor.

MR. SCHERMBRUCKER: Mr. Goodwin is not a party to this action.

JUDGE: You are objecting?

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IR. SCHERMBRUCKER: I am.

MR. O'DONOVAN: Would you agree that the excavations must have been completed in the early days of July. The second lot of trial holes. One was started in June. A. Sir, I would like to refer to the file.

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- Q. Please do. Can you answer the question?
  A. I have just found a letter. It was the letter
  I was looking for which agreed the digging of these
  trial holes.
- Q. After some had started? A. The letter is dated 8th July, 1955. I should say it was several days from that, so it would not in my opinion be the beginning of July but the middle of July.
- Q. I see. When did you do your inspection? Have you any notes of it? A. There was a note. I cannot find my copy of it, but I gave Mr. Ata ul Haq a copy in the presence of Mr. Goodwin and Mr. Thomas on the site on the day I made the inspection. The day the first samples were taken.

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- Q. Was that about the middle of July? A. I think it was later than the middle of July. It was two years ago.
- Q. You have no notice of it yourself? A. I had a copy.
- Q. What state had the works reached when you inspected the second lot of trial holes? A. I think they were ..... in the contractor's opinion they were complete.
- Q. And in your opinion not? A. In my opinion not.
- Q. Do you remember that certain screeds had not been laid on the floors when you examined the second lot of trial holes? A. I cannot recall.
- Q. However, you can recall this that at that stage there were other repairs to be effected before you would accept the works? A. I should say that was probably true.
- Q. You were aware, were you not, of the conditions in the contract relating to payment. That is, Clause 15 of the specification under the heading: "Herms of Payment". "That payments ..... at his discretion". Had Mr. Tanner left at that time?

NDGE: Is this the specification? A. Yes.

MF: O'DONOVAN: Had Mr. Tanner left when you examined the second lot of trial holes? A. Mr. Tanner 40 had left.

- Q. You were aware of the terms of payment described by the specification, were you not? A. May I look at it?
- Q. You had studied clause 15. It affected one of your most important duties. That is to prevent the misapplication of your employers' money? You had studied that? A. Yes.
- Q. Did you abide by it? A. I was authorised ....
- Q. Did you abide by it? A. It is not as simple as you may think. I would like some guidance.
  - Q. I will ask a simpler question. Did you become a party to the misapplication of your employer's funds?

JUDGE: I think that is unfair.

MR. O'DONOVAN: I should have thought he would have answered "No".

JUDGE: Have you issued certificates that you ought not to have done? A. I did not issue certificates.

- MR. O'DONOVAN: Did you draw them up? A. If I draw them up I don't issue them.
  - Q. Did you draw any up?

JUDGE: Did you draw any up whether on instructions or otherwise? A. The answer is 'Yes'. I drew up certificates.

MR. O'DOMOVAN: Did you draw up any which should not have been issued? Would you prefer not to answer that question now.

A. May I ask a question? Is it possible to discuss this with the Council's advocates?

30 MR. O'DONOVAN: You feel you would like to?
A. It is not for an answer. It is for procedure.

JUDGE: You say you would prefer not to say whether they should not have been issued? A. I would like more time to consider.

MR. O'DONOVAN: You could not have issued an interim certificate exceeding 90 per cent of the value of the work properly executed. A. I have already stated. I did not issue certificates. If you wish to say I am a party to them .....

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Crossexamination - continued.

- Q. Mr. Mould, you were very largely in control of this contract, were you not? A. Very largely.
- Q. The City Engineer was guided by you? A. In many cases it was the opposite way around.
- Q. I notice that a great deal of the correspondence signed by the City Council is drafted by you in your own handwriting? A. Yes.
- Q. You were not a clerk or a stenographer. You were composing those letters. He was guided by you. A. I did not dispute that. But he guided me as well.

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Q. You guided each other mutually. "Payments should not ..... 90 per cent of the works properly executed". Do you agree with that? If a certificate was issued for the whole amount it means that the whole contract has been properly executed?

JJDGE: That is a matter for argument.

MR. O'DONOVAN: When you issued certificates were any certificates issued, interim certificates, for payment of more than 90 per cent of the value of the work properly executed? Was the maximum adhered to, in fact?

JUDGE: Were any interim certificates issued for any amount in excess of the 90 per cent of the value of the work properly executed? A. Not as far as I know.

MR. O'DONOVAN: You can think about this again. One further question. The last certificate issued, that is on the 19th - 20th July and 23rd July, must have been after your examination of the second trial holes? A. Yes.

JUDGE: 21st July? A. Yes.

MR. O'DONOVAN: How could you be a party to that final certificate No. 13 if on examining the trial holes you had discovered an attempt at deceiving you?

A. In the first place you say the second day it was issued and I must have examined the trial holes at that time.

Q. I didn't say that. I asked you.

JUDGE: Was it after the examination of the trial holes. Was it before or after the issue of the certificates? A. I cannot remember.

MR. O'DONOVAN: I thought you said they would have been completed about the 14th July. Did you date the samples which you took?

A. Yes.

O. Where are they? A. They should be with the P.W.D.

- Q. Will you please endeavour to obtain the sample bags? A. I will.
- Q. The particular ones taken at the second trial holes? A. Yes.
- 10 Q. There is no record in your files is there of when you sent them to the P.W.D.? A. I don't think there are any on this file. I have had a look for them.
  - Q. Shouldn't you have a record on your file?
    A. I told you, I did have a letter, a copy of which was given to Ata ul Haq. I cannot find my copy. These files have been handled at public enquiries, and there is a lot of correspondence which should be here.
- Q. You examined the first lot of trial holes in May? A. It must have been the last two days of May or the first two or three of June.
  - Q. At least that was before the signing of this last certificate? A. Yes.
  - Q. Are you definite about that? A. Yes.
  - Q. You had ascertained the mortar in the foundations was weak? A. On that particular inspection? May I refer to my own memo?
- Q. This is not a memo about that particular subject. You said in Examination-in-Chief that the first lot of trial holes revealed weak mortar in the trial holes. Do you want to withdraw that statement, qualify it or adhere to it? A. At the first inspection.
  - Q. The inspection of the first trial holes in May revealed that the mortar in the foundation walls was weak. You said so. Do you want to query it? A. Could I be reminded in what form I said it?
- Q. Are you denying it? Are you doubtful about it?

  40 A. It is quite possible it is quite correct.

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Crossexamination - continued.

- Q. Do you give evidence on affirmation about possbilities? Is it the truth that in May the examination of trial holes revealed that the mortar was weak or was it just a possibility?
  A. A probability.
- Q. A probability? A. Probability.
- Q. Why were you a party to a certificate issued on the basis that everything had been done? If you don't want to answer that question we will leave it. A. I have answered that question. I was instructed to issue them.

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- Q. By whom? A. Mr. Saunders.
- Q. On the 21st July? A. It might have been the 20th.
- Q. Against your better judgment? A. Yes, against my better judgment.
- Q. In spite of what you pointed out to him. Did you tell him about your reservations about issuing them? A. I cannot remember exactly what I said.

JUDGE: Was your opinion that this finel certificate should not have been issued? A. It was my opinion.

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MR. O'DONOVAN: Did you put that in writing? A. Hay I have a look to see.

# 2.15 p.m. resumed.

All present as before.

### MR. O'DONOVAN:

I think there is now no longer any difference between my learned friend and myself. He concedes that an admission by a Clerk of Works should be admissible. He does not concede that evidence can be led of statement to the Clerk of Works. I do not press the latter aspect of it, I only seek to produce the second document signed by Mr. Goodwin.

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### JJDGE:

You agree on that?

#### MR. SCHERNBRUCKER:

I think it seems clear, under section 18, I have looked at p. 167 ....

JUDGE:

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I understand Mr. O'Donovan is only seeking to put in the second document and you will not object to that?

### MR. SCHERMBRUCKER:

There is only one statement in that that my learned friends want and I agree that that is a document by the Clerk of Works. I will not object. There are other items in it that I am sure Your Lordship will realise are inadmissible.

## MR. ROHALD FREDERICK MOULD:

## Cross-examination by Mr. O'Donovan: (continued)

Q. Is this a letter dated 27th June from the Clerk of Works informing you that one hole had been dug and it was ascertained that the original figure of foundation depths was inaccurate. It should have been four courses instead of three in one place? (Letter before witness) A. Yes.

(Letter put in as Ex. 69)

- Q. You see it goes on to say that the other holes will be dug, it says "tomorrow", doesn't it?
  A. It says: "He wants to do the rest tomorrow".
  - Q. I would like to ask you again the question I asked you before lunch were you a party to the issue of any certificate of payment which was not in accordance with the contract? Do you say you still cannot answer the question. A. I think it is an unfair question.
- JUDGE: Q. Do you not wish to answer it? A. I do not wish to answer it in that form, Sir.
  - Q. These payment certificates, I see, are in fact, signed by Mr. Bridger, all of them up to the 23rd March. Do you agree that? Thereafter Mr. Roberts signed certificates Nos. 10 to 12; Mr. Saunders signed the last one, No. 13; Mr. Bridger signed certificates Nos. 1 to 9. Do you agree that? (Ex. 35 before the witness) A. I do agree.
- Q. Did you have any arguments with Mr. Bridger about issuing those certificates?
  A. Not with Mr. Bridger.

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Crossexamination - continued.

- Q. I think you did say who Mr. Roberts was, but I forget? A. Mr. Roberts was, from April the end of April till about September, Acting Deputy City Engineer.
- Q. Did he overrule you in any of these certificates? A. I do not recall arguments with Mr. Roberts, it was with Mr. Saunders I usually discussed the matter.
- Q. Mr. Roberts' certificates go up to June 24th.
  Now, I take it then that you had no qualms about
  the issue of certificates 10, 11 and 12, which are
  Mr. Roberts' certificates? A. I have already
  told you that I did oppose the issue of this money.
  This is the first time, I can assure you, that I
  knew that Mr. Roberts had signed them.

JUDGE: Q. You did oppose the issue of those certificates, 10, 11 and 12? A. Yes.

- Q. And I take it you opposed the issue of certificate No. 13, did you Mr. Saunders' one? A. Yes.
- Q. Mr. Saunders overruled you, did he? A. Yes. He was the person, the Acting Engineer, who was the supreme authority to which I had to appeal with any plans.
- Q. Presumably you explained to him the grounds of your opposition? (No answer)

JUDGE: Q. During which period was Saunders Acting Engineer, roughly? A. From end of April until 1st September, when Mr. Salmon took up his appointment.

- Q. Bridger was before that? A. Yes.
- Q. Roberts was only Acting Deputy? A. Yes.
- Q. It was a hand over from Bridger to Saunders? A. Yes.
- Q. As the Engineer? A. As the Engineer.
- Q. Did you explain to Mr. Saunders the grounds of your objection? A. Yes.
- Q. In detail? A. In detail.
- Q. He disagreed with you, did he? A. That is a point I was coming to. Mr. Saunders put it to me that he himself would have to pass this on to the Council.

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- Q. Was it put to the Council, whether a certificate should be issued? A. Any particular reply to that I cannot say. I was not present. There were many meetings between Heads of Departments and particularly the Treasurer and the Engineer, that I was not present.
- Q. Isn't it a little surprising that this file this is a City Council file, isn't it? A. Yes.
- Q. Relating to this contract contains no hint of your disagreement about these certificates?
  A. You have at least one thing to say, that they were held up as a precautionary measure.
  - Q. Yes, but you held up all of them as a precautionary measure, on your initiative? A. I did, and I could hold them up beyond that, on my own initiative.
  - Q. And yet, with reference to that, you did not give any reason except that you held them up as a precautionary measure, because there was a general inquiry into the whole subject of African Housing? A. That is all I said.

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- Q. And was that the only reason why you held them up? A. That in itself is the only reason, and a very good reason.
- Q. So it had nothing to do with your doubts about whether the certificates should be issued for this particular work, it was connected with higher politics? A. I do not agree.
- Q. Did you indicate to Mr. Roberts in detail the grounds of all your objections? A. Yes; and Mr. Roberts did come down to the site with me in May I should say about 17th May.
  - Q. And issued the certificates in June? (No answer)
  - Q. I put it to you that there is nothing in this file that the maintenance period was not to be postponed for the works as a whole in fact, there is a letter to that effect. I propose to put it to you. Would you look at Ex. 43 (Before the witness)? A. I have Ex. 43.
- 40 Q. Is that a letter from you? A. It is signed by the Acting City Engineer, but I drafted it.

(Witness reads Ex. 43 to the Court)

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Crossexamination - continued.

- Q. Did he reply to that, verbally or in writing?
  A. I was under the impression that we had had a
  written reply, but a reply did come. It is possible it might have been passed on by Mr. Goodwin in
  one of his memos., but I can assure it is the
  truth, that I was under the understanding that the
  contract would be prepared from the last block.
- Q. He was prepared to do all the maintenance work? A. Yes.
- Q. That is all? It only related to when he would do it? A. That is what I understand, he would be prepared to do the maintenance work.
- Q. You prepared this final certificate No.13 did you not, sent it to the City Treasurer under cover of a letter dated 19th July? A. Yes. The top copy is dated 19th July and the other two are dated 15th July.
- Q. There are two documents which are annexures to your letter, or attachments, is that correct? A. Yes.
- Q. One is some calculations of your own, in your own handwriting, and the other is a report signed by Mr. Goodwin, is that right? A. Yes.
- Q. Did you read Mr. Goodwin's signature? Do you recognise his signature? A. I do recognise his signature.
- Q. Do you agree that he prepared that report to the City Treasurer without one word of reservation on your part? A. No.
- Q. What reservation did you make? A. This matter was discussed it is my normal duty to prepare this report it was discussed with the Engineer, that is Mr. Saunders.
- Q. You made your reservations verbally? A. Yes.
- Q. Would you agree that that letter contains no indication, on the face of it, that you had any qualms about this certificate? A. On the face of it it does appear so.
- Q. It is based, is it not, on this return of work signed by Goodwin? A. Not entirely.
- Q. It conforms with it? A. It conforms with it.

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- O. And you see that this shows that at that time blocks 30, 38A, 38B and 39 were a hundred per cent. complete and ready for inspection? A. Yes.
- Q. And it also shows that the remaining two, 37 and 38, were 95% completed, but there were some minor items to do? Is it his job to fill in this form?

  A. The Clerk of Works.
- Q. Yes. Here is a printed form, with the cyclostyled words at the bottom "Clerk of Works". Is it supposed to be signed by him (Before the witness)? A. The Clerk of Works fills in this form.

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- Q. In the course of his duties? A. In the course of his duties.
- Q. And he said here that those four blocks, although not perfect, were ready for handing over and the others were completed except for making minor repairs?

  A. Yes.
- Q. Did you not realise that the City Treasurer, to whom you addressed this, would authorise the payment on the strength of your certificate, your signature at the bottom of this letter? A. No, you are completely mistaken, it is authorised by the final signature of the Engineer.
  - Q. But isn't it the procedure that the City Engineer, in fact, leaves the question of certificates entirely to the Architect? A. No.
- Q. Did you not think that you should contradict some of these observations of Mr. Goodwin if you did not agree with them? A. I can assure you they were contradicted.
- Q. In this letter? A. Not on that letter.
- Q. Didn't you think it necessary, where you were being overruled by officer after officer, for your own safety to put on the record some indication of your objections Mr. Tanner had not agreed with you, Mr. Saunders had not agreed with you, Mr. Roberts had not agreed with you? A. I am sure some of my objections must be on the record.

(Hetter and two enclosures put in as Ex.70).

Q. You feel you did make a written report setting out your objections to the issue of those certificates? A. I have already said that I am not

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Crossexamination - continued. sure that I did that in writing. I think I said that to the best of my knowledge I mentioned that verbally.

- Q. When Mr. Goodwin read to you his last memorandum dated 25th July, saying that these last two blocks have now been completed and the repairs carried out, did you get the original of that memorandum? A. It is quite possible. It should be included in that file.
- Q. Do you remember it? A. I do not remember it specifically, but it is typical.

JUDGE: Do you agree that you must have got that memorandum from him? A. Yes, I do agree.

- Q. (Ex. 34 before the witness) Here is the original, did you see it? A. Yes.
- Q. You must have got it? A. Yes.
- Q. Did you agree with what Mr. Goodwin said? A. No, I did not.
- Q. You were in the habit, were you not, of giving written directions to your Clerk of Works?
  A. Not completely.

JUDGE: Q. Some verbal and some? A. I am afraid I was extremely busy at the time.

- Q. You sent a lot of written directions and I do not doubt you also gave him verbal directions, is that the position? A. That is the position.
- Q. First of all, do you see Ex. 34 says "repairs carried out" Presumably that refers to some repairs which you had directed should be carried out? A. Yes.
- Q. It refers to actual repairs, actually carried out? A. Mr. Goodwin says they were carried out.
- Q. Do you doubt? A. I cannot recall.

JIDGE: Q. Repairs you directed? A. Yes.

- Q. Did you contradict that memorandum in any way? A. If you mean in writing, I cannot recall.
- Q. You mean if I mean in writing you cannot find it? A. I did not say I could not.

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- Q. Did you contradict it at all? A. I am sure I contradicted it, because I was not satisfied with blocks 37 and 8 in 38.
- Q. Those are the two blocks about which you had earlier written yourself that the work was quite reasonable? A. "Reasonable" does not go all the way, does it?
- Q. Did you have any further inspection and give him the list of repairs? A. No, but I had many further inspections.
  - O. Yes After you had decided, or the Council had decided, not to take over these blocks? A. I am not sure, quite, the date that I recommended that these blocks were not to be taken over. I did recommend this and that must be in writing somewhere.
  - Q. My learned friend says this is it, a letter dated 6th February, 1956. Is that what you mean? A. No, there were some written much earlier than that.
- 20. Did the Council occupy these blocks? A. The Council did not occupy these blocks in the contractor's time. They have been occupied, I think, now, for about five months, and it is after remedial work and partly pressure on the African housing needs, which are very great.
  - Q. Weren't they all occupied at the time when the Commission of Inquiry on the City Council was held? A. No, definitely not.
- Q. Are you sure of your last answer? A. I am quite sure of it. Mr. Cocker was present. We went round block 38 and looked at a lot of cracked floors. You may be confused into thinking, one or two of the rooms were occupied as site offices by the Clerk of Works; one or two of the rooms were occupied temporarily by some of the labour. I am not sure, there was an awful confusion as to where they were putting the labour that was working on the blocks.
- Q. When you discovered that somebody had tired to deceive you about the foundations by putting in extra pointing where they had dug the second holes, did Mr. Goodwin see that? A. Mr. Goodwin saw it.

JUDGE: Q. Mr. Goodwin saw what, precisely? A. Mr. Goodwin saw the mortar that must have been put in.

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Crossexamination - continued. JUDGE: Q. And he saw the holes enlarged? A. He saw the holes enlarged, and so did Mr. Thompson.

- Q. Were you shocked? A. I was getting over being shocked there.
- Q. Will you describe your feelings, if you had any? A. I was taken aback.
- Q. Sufficiently to make any note about? A. I cannot recall whether I made a note.
- Q. You know very well you did not? A. I beg your pardon, I said I cannot recall.

Q. Did you make any note at the time, I do not mean letters written in October? A. I cannot recall.

- O. Did you accuse the contractor? A. I certainly did, he was present.
- Q. Do you find it surprising, or not surprising, that there is no mention in this file from Mr. Goodwin or yourself of such a discovery at the time? A. I do not find it surprising on Mr. Goodwin's part.

Q. On your part? A. I do actually, yes, surprised that I have not put a note in there.

- Q. These other samples, in respect of which the analyses are missing, did you take all those in the contractor's presence? A. You mean in the Council representative's presence? I am sure this is the case, that some of the latter samples, they must have been taken early in August, at the time when the contractor removed his plot. I have referred to it before.
- Q. I am talking of the earlier ones, which you and Goodwin took. You said there were quite a number? A. Yes, there were 12.
- Q. Were they all in the contractor's presence?
  A. The contractor was present in some cases, he was standing right by us; and other times he was walking backwards and forwards, but he was there.
- Q. To mefer to the second lot of trial holes, where you said the cement filling had been patched up? A. On a percentage of them.

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JUDGE: Q. These were the trial holes that were dug in July, where the mortar was patched up - the second lot of trial holes was where the mortar was patched up? A. Yes.

- Q. Did you see any patching up, any improvement? A. No. none at all.
- Q. Did the mortar which you saw in May differ from the mortar revealed in July, when you had these holes enlarged? A. The point is that they were not the same holes.
- Q. But was the nortar the same quality? A. I do not particularly recall a great deal about the inspection in May.
- Q. Whose servants enlarged these holes? A. I called over City Council park labourers.

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- Q. Did you see anybody in charge of the City Council labour? A. Yes, and his permission was sought, and I am sure it was Mr. Cameron.
- Q. And when you say that the holes had been repatched with better mortar, is that a matter of direct observation, or is it a deduction from the fact that the mortar was hard there? A. A deduction from the fact that the mortar was hard; the mortar was of a different colour; and that the mortar conformed to the profile of the hole originally dug.
  - Q. And are you sure you talking of this, and not some other contract? A. I am quite convinced that I am talking about this contract, and I well remember the first hole we opened. The first one we came to on block 38 was of this nature.
    - Q. Did you not think it worth while to prove your point by comparing samples of the better quality mortar? A. From my point of view as an architect, I am interested in finding mortar that was below specification.
  - O. So you were not interested in anything which looked good enough? A. There were cases of marginal ones, but generally, I was more interested in condemning. All this I was pretty sure was good.
    - Q. But you were not simply leading work where the wall had been patched up because it was good here, you had a very line opportunity to prove that, in

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Crossexamination - continued. fact, there had been a deliberate deception, which is entirely different, isn't it. Here a good result, a good analysis, the mortar where the wall had been patched up would form a very interesting contrast to the bad mortar and would prove your point, wouldn't it? Didn't that interest you as A. It did interest me, but I thought architect? it extremely petty, I was after something far bigger.

- Q. Why didn't you take any samples of the mortar which you saw had been put in afterwards? A. Because I was not reasonably satisfied that that was not far off specification.
- Q. Perhaps I have not made my point clear did you form an opinion then and there that that was an attempt at deception? A. I did.
- Q. And it was an inference based on the difference in quality between two lots of mortar? A. It was.
- Q. Had all the holes been tampered with like this? A. No, I have already answered that, about 60%
- Q. Did you enlarge all the holes? A. I have already answered that - about 60% were enlarged.
- Q. I see, you only enlarged about 60% of the holes, so you could not with regard to the other 40% say whether there was any contrast between the exposed mortar and the hidden mortar? A. Yes, there is the 40% remaining. The samples were taken from the remaining 40%, there the mortar appeared to be much stronger than we had previously seen. I beg your pardon, I want to get this right, - It was not as strong, in my opinion; the contractor thought that that was good enough and cid not, in my opinion, tamper with it.
- Q. How can you tell that without enlarging the A. Well, there was a great deal of difference - you could not, obviously.
- Q. You were going to say there was a great deal of difference? A. When we enlarged the holes and found we had the hard mortar in the middle in the 60% and in the other 40% .... proved him wrong.
- Q. Proved him wrong or proved you wrong? A. He left it there.
- Q. So, we have an effort at deceiving you and you took no samples to prove; no note at the time; and you followed it up by saying that the work is all

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complete - that is your evidence, is it?
A. I have already told you that I put my opinions to the Council, to my senior officials.

- Q. Do you know where Mr. Goodwin is now, do you know that he is employed by the County Council in Makuru? A. This is the first I have heard.
- Q. Or is it Gilgil? A. I do not know.
- Q. Are you acquainted with his handwriting? A. Fairly familiar.
- 10 Q. Would you look at two exhibits the first is a plan which he drew of foundations (Ex. 7 before the witness). Can you see any of Mr. Goodwin's handwriting on that? A. Yes, I recognise this as Mr. Goodwin's handwriting.
  - Q. Which part of it has his signature on it?
    A. He has initialled it. He has not completed his signature.
- Q. Would you also look at some detailed pages of the foundations compiled by Mr. Stone (Ex. D before witness)? Do you see some handwriting on this Ex. 3 in pencil on p. 4 Contractor claims ...."?
  A. Yes.
  - A. Is that in Mr. Goodwin's handwriting? A. That is in Mr. Goodwin's handwriting.
  - Q. And the other pencilled comments on other pages? A. It is all Mr. Goodwin's handwriting.
  - Q. Now, would you look at Ex. 46? A. Yes.
- Q. Does that start "Thank you for your letter dated 23rd August"? A. It does, dated 6th September 1955.
  - Q. That was your draft? A. Yes.

JUDGE: Q. It was drafted by you? A. Yes.

- Q. Would you look at the third query on that: "You do not .... a matter for negotiation". Does that correctly set out what the dispute was between the Council and the contractor at this stage? A. Part of it.
- Q. In other words, was the situation that the contractor had indicated his willingness to remedy any defect in terms of Clause 9 (2) of the General

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Crossexamination - continued. Conditions, but that the Council wished him to go very much further than that? Is that right? A. Yes.

- Q. And he was prepared to fulfil his obligations as laid down by section 9(2) and that was not good enough for the Council, is that clear? were beginning to find out it was not good enough.
- Q. That is clear, isn't it? A. That is clear.
- Q. And it was in consequence of his refusal of that extra demand that negotiations broke down? A. Not at all. Mr. Ata Ul Hag had every chance to go further - 6th September, signed by Saunders; Mr. Salmon took up his appointment on 1st September and it was not until November, and there had been a series of negotiations with Mr. Salmon in which the matter could have been resolved to some extent.
- Q. He never did agree to do the major reconditioning, surely that is the crux of the dispute between A. I feel that I am entitled to put the answers in the best way that I know them. You referred to the major things, I would like to point out that it was not until even some months after that we really realised what the major defects were.
- Q. I am putting to you that in that letter you have correctly represented, or set out, the nature of the issue between yourself and the contractor. am suggesting to you that what you wrote in that, what you wrote was wrong. You appear to want qualify, when I am trying to suggest that you were A. You referred to the words "major Deright? fects".
- Q. Yes? A. The real major defects, I am sorry, were not known until later.
- Q. Well, now, will you kindly concentrate on my question. When you wrote that letter in the beginning of September, did that paragraph accurately represent the issue between the Council and contractor?

JUDGE: Q. Issue at that time?

Q. Or did you write a letter which was inaccurate? A. I do apologise here to Mr. O'Donovar. used the word "major reconditioning" and it was probably major in the light of what we were seeing at the time.

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JUDGE: Q. Did that accurately set out the dispute at that time? A. These are reversed quite a bit, can I just get it all in context? We are taking one part. It does refer to .....

JUDGE: Q. Does it directly set out the dispute as it was at this stage? I have already answered this, it covers a part of the dispute.

- Q. Is it accurate? A. This part is accurate.
- Q. It does accurately set out the issue? A. Yes.
- Q. And it was the failure to resolve that issue, as such, which led to the Council taking over the contract? A. It probably led to it; but, as I have already said, there were other parts. It led, at the end of this letter, to a negotiation with the Mayor.
  - Q. But, basically, you wanted everything redone and the contractor would only do what he called maintenance? A. I agree.
- Q. I think you said it was not until about March of the following year that you had any real conception of the extent of the defects, is that right? A. Yes.
  - Q. March 1956? A. The defects concerning foundations.
  - Q. I want to put something to you from the record of the Commission of Inquiry. First of all you refer to the letter to Mr. Ata ul Haq dated 22nd October, Ex. 50. Is that a letter saying? "I received your letter ..... are as follows"? A. It is the same letter.
  - Q. And it ends, does it not: "You have now been provided with all the information you require"? A. Yes.

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- Q. Did you say to the Inquiry with reference to that letter, when you were asked: "What does that mean, exactly"? "We had asked ....." Do you remember saying that? A. Yes, I think I do.
- Q. So, in other words, that letter sets out the sum total of the information which Mr. Ata ul Haq was given? A. It answers the question, here Mr. Haq is asking for the laboratory report on the samples of mortar.

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Crossexamination - continued.

- Q. But it ends by saying: "being provided with all the information you require"? A. In answer to his letter.
- Q. Does that represent all he was told about the defects? A. To the best of my knowledge it must have been so.
- Q. This question and this answer are recorded in the record of the proceedings. Mr. Brooks said to you: "Finally you ordered him off the site, did you"? answer: "Finally yes, Sir". Did you give that answer? A. Yes, I should imagine I did.
- Q. Was that a truthful answer? A. No. When I saw he means "you", I do not suppose he means personally "me", he was referring to the Council.
- Q. Was that a truthful answer? A. That is truthful. He was given a date to return and do the work and if he failed to do it he would invoke the clause.

JUDGE: Q. He did not necessarily refer to you personally, but he was ordered off by the Council? A. Yes.

- O. Did you work out this estimate 30th September 1955 "Estimate of cost of replacing floors £3,750" signed by you. Is that your estimate? Did you sign that? A. I signed it.
- Q. Is it your estimate? A. Yes.
- Q. And did you there estimate the total cost of taking up 50% at £3,750? A. Yes.

(Estimate put in as Ex. 71)

- O. Your estimate, that is that 50% of the floors would have to be taken up and redone, is a rough estimate?

  A. It is a rough estimate.
- Q. You have not determined the exact proportion by proper inspection of each of them? A. Not by proper inspection in as much as you could not until you took them up.
- Q. Have you had experience in conditions in Kenya on which to estimate the life of a building?
  A. Only that I have had just three years now. At the time you can say a year, I suppose.

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- Q. When you say these buildings would last 20 years, isn't that a blind guess? A. No, it is not exactly a blind guess; and I would say you did not have to live in Kenya to make that guess.
- Q. Do you know how many reports Mr. Wevill put in? A. I am sorry, I think you had better ask Mr. Wevill that one.
- Q. Have you discussed this with him? A. I have had a number of discussions with Mr. Wevill and, as far as I know, he put in one report on each of the contracts. I think he put in maybe one, or possibly two, smaller reports prior to this.
- Q. Earlier ones? A. Yes.

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- Q. On this contract? A. It may have been just separate, it may have been joined to all three. I cannot remember particularly.
- Q. The re-pointing of walls which was done by the City Council, was that done under your supervision?
  A. It was done under the supervision of my Clerk of Works. I used to visit the site about once a week so, directly, the answer is yes.
  - Q. And were you satisfied with the way it was done? I would just like to know what your present stand-ards are? A. I would not say that I was highly satisfied, but it was as near as we could get under the conditions we had.
  - Q. And do you agree that "as near as you could get under the conditions you had" with regard to the re-pointing, was a great deal worse than the contractor achieved? A. If you are referring to the mortar that was dug out on Wednesday, that was not done under my supervision.
  - Q. You agree that is a great deal worse? A. Yes, no, it was pretty soft. It may not have been so low in cement content.
  - Q. It was pretty bad, whatever the reason? A. Well, I qualify it in a more technical way.
  - Q. Who supervised that Block 37? A. I would not know.
- 40 Q. When was it done? A. I should imagine it has probably been done since I left the City Council.

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Re-examination.

## Re-examined by Mr. Schermbrucker.

(Ex. 71 before the witness).Q.That was an estimate you made when? A. This estimate was made on the 30th September, 1955.

- Q. And on what basis was that estimate made? What does it refer to, how much of this contract?
  A. It is estimated on 50% of the floors being repaired.
- Q. Does it cover anything other than floors?
  A. No, it refers to floors and the hard core filling.

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Q. How does that compare with your opinion of what is required in this township today - as to what it would cost to put Part B in order today? A. Well, the cost would be more today because of increases in prices of material and labour.

Q. I am talking about the whole contract. When I was examining you in-chief, you gave me a fairly big figure. Is there any reconciliation?

A. This estimate is an alternative estimate. I made an original estimate and I have made others since on comparable lines, for taking out all the hardcore and breaking it up into proper sizes, putting it back and consolidating it and replacing floors to specification. I would make it quite clear this does not take into account taking up the hard core. This says "ram the floors".

JUDGE: Q. What is the essential difference? That that estimate does not take into account the taking out and replacing of the hard core and Mr. Wevill's does? A. Yes.

- Q. And what was the main object and purpose of that one in front of you now? A. This was a matter of some discussion that was going on behind the Council's doors, as to what would happen if they pushed the issue, as we might compromise and ask for a different standard instead of taking out and getting it to specification, whereas we might try and get the floors up to reasonable standard, that was the basis of this estimate here.
- Q. And if you had gone through with that, would that still leave the work below specification?
  A. It would have left it considerably below specification, yes.

- Q. And did anything finally eventuate on that project between the Council and the contractor, or was it between the Council and the contractor, or was it the Council only? A. I really cannot quite remember at the moment.
- Q. Did you go ahead to do anything on the basis of that estimate? A. I do not think this report came to anything.
- Q. Is that your handwriting (Document before the witness)? A. Yes, that is my handwriting.

MR. SCHERMBRUCKER: This is a letter, or report, addressed by the witness to the City Engineer and it puts on record various complaints. May I read it, My Lord?

(Letter put in as Ex. 3 - Read to the Court by Mr. Schermbrucker)

Q. What led you to produce this report?
A. Having seen more of the contract in detail, I had come to the conclusion that it really was not worth spending a great deal of money on them, as we were doing.

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- Q. That figure of yours there, of £62,000, would that have produced a result better than the specification, or not? A. No, it could not have produced a result better than the specification.
- Q. What I want you to do is look at that in conjunction with Ex. 71, that estimate of £3,750. On the face of it there seems to be a big discrepancy? A. Well, there is a considerable discrepancy. Of course, this refers to floors and Part B: "Estimate for taking .... £18,000". Out of memory, I suggest it was about £17,000 earlier.
- Q. What do you mean by that? Can you compare Ex.71 with this? A. Yes.
- Q. Are they different estimates of the same thing or not? A. IIC, they are not estimates of the same thing. One involved considerably more work.
- Q. Is there any item here in Ex. E that you can compare with Ex. 71 on any basis? A. No, only that the floor was relaid in each case.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Re-examination - continued.

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Re-examination - continued.

- Q. Now, you refer to your item 2: "Estimate for taking up floors and back fill and to relay £18,000". How does that compare with the other A. Inasmuch as that in this one I am allowing for all floors to be taken up and relaid; all back fill to be taken out, put back and consolidated; as asked for in the specification. In this case we are only asking for 50ft. of floors to be relaid.
- Q. You told my learned friend that that 50% was a rough estimate? A. Yes.
- O. What grounds have got for including in your estimate, in Ex. E .....

JIDGE: Q. On the basis of this estimate, Ex. E. 50% of Item 2 under the Part B contract, that is the taking up of floors, back fill and relaying, would be £9,000? A. Yes.

- Q. The other exhibit, 71, for relaying 50% of the floors, the estimate would be something under £4,000? A. That is correct.
- Q. Do I understand you right, that the difference of the two estimates is due to the taking up of the back fill? A. Yes, it means taking up of the .....
- Q. Taking out of the back fill and relaying the back fill would cost something in the nature of over £5,000, it would be the bulk of the expens-A. Yes, it would contribute to a considerable amount, yes.

MR. SCHEREBRUCKER: Q. Do you consider that there is any reasonable. practical, way of getting those floors satisfactory for a 40 year life in a less expensive way tian taking out all the back fill and compacting it back again? A. To produce a really satisfactory job, no.

MR. O'DONOVAH:

I am not objecting to the letters going in.

MR. SCHERIBRUCKER:

They are only put in on the point my learned friend raises and I quite agree there is no record of the witness' complaints.

: EDCUL

This is very much earlier.

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MR. SCHERMBRUCKER:

I have not got any earlier records. This is some time before the suit.

Q. Would you look at that one (Before the witness). Is that your handwriting? A. Yes.

### MESCHERMBRUCKER:

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This is a letter of the 6th February, 1956, from the witness to the City Engineer.

(Letter put in as Ex. F.)

- Q. Will you look at those items under A. & B there, are they relative to part B? A. They are in part, yes. Where we refer to "we found 2ft. black cotton soil and recommend total demolition", that refers to part A.
  - Q. Otherwise, are they fairly relative to Part B? A. Otherwise they are.
- Q. You have told us that you have had only a limited experience of Kenya. What experience as an Architect have you had before coming here? The 20 number of years A. From about 1946.
  - Q. You told my hearned friend that after Tanner left, you went on trying to improve the buildings, very little work was done after he left. First of all, you went on trying to improve the buildings. Did you perhaps over-emphasise your efforts and try and get then above specification, or not? A. No, I knew they would not have reached specification.
- Q. When it came to the signing of certificates, I think you have sold us that the City Engineer always signed then; that you wrote them in accordance with practice, on his instructions, is that right? A. Yes.
  - Q. (Ex. 43 before the witness). That was the letter you wrote to the contractor, asking him if he would like the maintenance period to run separately or jointly for the lot: "Some of your blocks are now due for maintenance under the conditions of the contract. Do you wish to carry out this work as each block falls due, or to deal with the whole of the contract at a later date? I should be grateful if you will let me know". If you look at your fale there is a note in your writing below that. Would you refer to that note and tell His Lordship what information you wrote the letter on and do you know where you got that from? A. Yes.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Re-examination - continued.

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Re-examination - continued.

The information was provided to me by Mr. Goodwin. I have made a note of verbal .....

- Q. You did it on information received? A. Received from Mr. Goodwin.
- Q. Now, have you ever sent a reply to that letter? Did you personally know of any specific allegation that the contractor made on that letter of yours?

  A. I was of the opinion that we had had a letter also from the contractor confirming what Mr. Goodwin had told me.

Q. In Ex. 48, the last paragraph, a letter from the City Engineer to Ata ul Haq, dated 14th October: "In conclusion ..... in accordance with the terms of the contract". Do you know, yourself, whether there was ever a reply? That refers to the same subject.

### JUDGE:

I should have thought, on the basis of it, that that would have referred to different repairs.

MR. SCHERMBRUCKER:
Perhaps I am wrong.

JUD CE:

This would appear to refer to the main subjects which are in dispute.

MR. SCHERMBRUCKER:

I thought for a moment it referred to the same thing.

- Q. Can you say, from your own knowledge, whether you have ever seen anything from the contractor, what he would like to do, in reply to that letter of yours? A. I was under the impression, I may well be mistaken, that we had a letter from Mr. Ata ul Haq stating that he would do the maintenance work from the total acceptance of the last block by Council.
- Q. Now, you said when you took over, or prior to taking over: "I would .... lists of defects". Did you go through the blocks, room by room, preparatory to the issue of each of the certificates that was issued?

  A. Yes.
- Q. Up to the date of the issue of the last of those certificates, had you seen the nature of the back fill under the floors of any of the blocks in Part B? A. No.

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Q. You said, as regards foundations? "I checked details. I left a list of defects with the Clerk of Works". When it comes to defects, would you tell His Lordship what is the normal duty of the Architect and the normal duty of the Clerk of Works? A. With regard to defects, the Architect would authorise what defects he wished to be attended to; it would be the Clerk of Works who would be responsible to see that that work was carried out. He would then report to the Architect that the work had been satisfactorily completed. Sometimes the Architect would accept the Clerk of Works word for it. I usually went down and saw it myself.

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Q. I think you used the word "deputised" - "I deputised work to the Clerk of Works". Did you ever, in fact, hand over to the Clerk of Works any work that should have been done by the Architect, as such? A. No.

- Q. And you said that you knew that you were entitled to order removal of defective work under Condition 9 (1). You did have tiles removed and floors relaid. When you talk about "floors relaid", what do you mean? A. It was not the floor, it was the screed surface that was relaid. I can only think of the screed being relaid in about two cases in the early stages.
- Q. And did you ever depute to Goodwin the right to say whether or not any work should be taken up and put down again? A. With regard to certain defects, yes.
  - Q. What defects? A. I should think the most serious of the nature that I had authorised to be taken up and Mr. Goodwin to supervise would have been the screeds to the floors.
  - Q. Did you ever depute to him the right of ordinary concrete floor to be taken up and the filling underneath to be taken up? A. Yes, in one instance, Part B on Block 39.
- Q. What did you do on Block 39? A. It was the result of an incident. I found that the floor, from the point of view of normal testing, did not seem stable. I asked for part of the floor to be revealed so as to examine the back fill. As a matter of fact, this was not done and it was at repeated requests that we finally got that part of the floor opened up; and that was the first time I saw any back fill of Ata ul Haq's.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Re-examination - continued.

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Re-examination - continued.

- Q. I think you did say the date of that? must have been late July. I am sorry, I cannot recall it at the moment exactly.
- Q. Who was the one who ordered the taking up of the floor on that occasion? A. I did.
- Q. What do you mean when you say that you deputed to Goodwin the right to order the taking up? A. To see that it was carried out. I was not present when it was actually opened up. Goodwin's job was to be to negotiate with the contractor and get it taken out.

Q. I understand from your answer that you handed over your job to Goodwin. Did you ever say to Mr. Goodwin that he exercised the discretion and say whether this should have been taken up or not? A. This does not refer to the same instance. It was at a much later date, after the contractor had been relieved of his responsibilities. Otherwise, no.

10.30 a.m. 8th July, 1957, resumed.

All present as before.

## MR. RONALD FREDERICK MOULD:

Re-examination by Mr. Schermbrucker: (continued).

#### MR. SCHERMBRUCKER:

We had suggested that we go down to see the site during Mr. Saunders evidence and it may be convenient to do so during Mr. Wevill's evidence. We have had the holes dug as agreed and if it is satisfactory to the Court I would like to ask to do a visit this afternoon.

JUDGE:

There is something that you think I should see there?

### MR. SCHERMBRUCKER:

I do not think it will be a long visit. But there was a hole done that Your Lordship saw. There are three more open which have been selected by Mr.Stone, and I have to get over any suggestion of unfairness.

MR. O'DONOVAN:

I would oppose that as taking up too much of the Court's time.

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JUDGE:

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I am no expert on building matters and I have to rely very largely - in fact, entirely - on the expert evidence. I am not in a position to judge by looking at the site, apart from getting a general idea of what witnesses are talking about. If there is something that I really should see, I am perfectly willing to go, otherwise I should imagine that I can be told everything that there is to be told about these holes by Mr. Wevill.

MR. SCHERMBRUCKER:

I feel that in this case there is something that Your Lordship should see.

MR. O'DONOVAN:

I would ask that a decision on the matter be deferred until Mr. Wevill has given his evidence.

JIDGE:

It is perhaps a pity that Mr. Wevill has not seen them. There should be evidence before me as to whether a visit to the site is necessary or not, as to those holes.

MR. SCHERMBRUCK R:

I think we could arrange to let him go down and see it at lunchtime.

### Re-examination:

- Q. You said in cross-examination that a different standard was applied when accepting the blocks than you apply now. Would you explain what you meant by that? A. In accepting the blocks I was only aware of what I could see and what I had dealt with myself. The standard that I now judge those buildings on is that of having seen work done prior to my going to the site and supervising the work.
- Q. Could you explain, as briefly as possible, what your reaction was when you first saw the site and when you came to realise that it was something otherwise? A. When I first saw the work, obviously I could only judge on what I could see and as a professional person carry out normal professional etiquette in building that my predecessor, who I did believe was extremely capable, had seen the work done efficiently.

JUDGE: Q. I thought that the comment that you made in the cross-examination on the different standards, was that the different standards were applied by your predecessor and yourself? A. I did not mean to imply that at all.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Re-examination - continued.

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Rc-examination - continued.

Q. What did you mean to imply? A. Well, I was of the impression that Mr. Tanner had tried to work to the standards that one would normally accept, and that is the standard of the specification. That was my first impression, first understanding. This answer would be varied by my experience. The more I found there was wrong the more I found there was some explanation by somebody that something had been overlooked for certain reasons - Emergency, labour, shortage of materials were blamed - and I would try and resolve them.

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Q. Was your first impression, when you first took the work on - a knowledge or an assumption? You told us by the time you took over the work was 80% complete. You gained a first impression when you first saw the work. Was that first impression based on any personal knowledge or was it an assumption? A. A small part of it was on personal knowledge, that I could see, particularly with regard to the foundations that I was looking at; and it was only a small part of the contract. Blocks 25, 26, 27, and they were 95 to 100% com-pleted - in that few that I formed, were coloured by what I was told. Mr. Tanner gave me no indication. And there was a very very strong point that he did make clear to me, that I could rely on Mr. Stone's reports when it came to assessing the work that was done each week and each month, and that had been his practice. I did feel that the work had been done well.

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Q. What led you to change your mind? A. It was a very gradual process. I should not discuss Part A. It was Part A opened my eyes. I found bad work on Part A and obviously I was more suspicious then about Part B. As I have already mentioned, Mr. Ata ul Haq was a contractor who could put a lot more polish on to his buildings in completing them.

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Q. Leaving aside Part A and confining yourself to Part B, what led you to form different views about Part B? A. It is very difficult to divorce my views totally on Part A and Part B. If I may be permitted just to refer once more to Part A?

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Q. No, we do not want Part A. A. The cracks in the floors of Blocks 25 and 27 in Part B, there were a considerable number of cracks in the floor screed. You could attribute cracks in the screed to almost as many symptoms as you can some human ailments.

- Q. Seeing those cracks, did that lead you to do anything? A. It did.
- Q. What did you do on Part B? A. On Part B, where I found a particularly bad floor I asked for it to be opened up. It is that one I have already referred to on Block 39. Having opened up the floor, I found the back fill and the quality of the floor was about the same as I had experienced.
- Q. Did you gain a sufficient knowledge of the underground work to enable you to express a general opinion on Part B, underground? A. No. I had only seen one. I could only make an assumption, but I could not get Council's officials to go all the way with me.
  - Q. Did you ever acquire sufficient knowledge of the underground work in Part B? A. Yes, I certainly did.
  - Q. To express a general opinion? A. Yes.
- JUDGE: Q. When, to express a general, confident, opinion, it would have been about February 1956, that is during the period that the Council's direct labour were working on the buildings? (No answer).

MR.SCHERMBRUCKER.

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- Q. You said you formed the impression that Part B was better than  $\Lambda$ ?  $\Lambda$ . Yes.
- Q. Does that in any way lessen your criticism of Part B as a job? A. No, it does not lessen it at all.
- Q. Do you think that you were being a little too critical of the work in Part B? A. No, I do not consider I have been too critical at all. As a matter of fact, I consider that probably in the early stages I gave too much credit to the foundations, which deceived me.
  - Q. You said you knew Mr. Tanmer had given many verbal instructions. Did you have any personal knowledge of that? How did you know that? A. On many occasions I was querying details on the site with the Contractor and Mr. Stone and often I would be told "That has been changed. Mr. Tanner asked for it to be changed".
  - O. It was just what the contractor told you?
    A. And the Clerk of Works; and I did, during the time that Mr. Tanner was there, check one or two of these points with him.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Re-examination - continued.

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Re-examination - continued.

JUDGE: Q. And he agreed, did he? A. He agreed on some of them.

- Q. Do you know of any altered instructions, verbal or otherwise, in regard to the hard core filling under the floors? A. By Mr. Tanner?
- A. Excluding myself, of course, Q. By anybody? in this case?
- Q. Including yourself? A. I know of no instructions, I cannot recall any, that were made by anybody else to the hard core back fill.
- Q. You saw the hard core filling in the floor, that was opened down in Part B? A. Yes, Block 37.
- Q. Could that, anything there, be described as to specification or satisfaction? A. No, it could not be compared with what was required in the specification. It is most unsatisfactory.
- Q. You referred to a visit to the site with Mr. McConnell. Do you remember how long that visit A. I do not remember how long exactly on Part B. We were on Ofafa Estate just over an hour. I think we spent about half an hour on Part B.
- Q. Was the contractor present then? A. Yes, the contractor was present.
- Q. Was there any conversation regarding mortar by any of you? A. We were discussing mortar constantly as we went round the buildings.
- Q. Did the contractor say anything about the mortar? A. Yes, I remember exactly where we were standing at the time, too. The contractor said that if there was any mortar in his work that exceeds 1 to 12 - something like that, it was certainly a modest estimate on his part - he said we could keep all the money that was outstanding to him. I asked Mr. Goodwin to make particular note of that comment.

MR. O'DONOVAN:

I submit this does not arise in re-examination.

JUDGE: I do not know, offhand, precisely what arises out of, but there was a lot of re-examination about mortar.

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Q. What is that (Document before the witness) and is your signature at the bottom of it? A. Yes, my signature is at the bottom of it.

(Letter dated 25th July 1955, addressed to Mr. Saunders, Acting City Engineer, by the witness, read to the Court by Mr. Schermbrucker - put in as Ex.G.)

MR. O'DONOVAN: Subject to my right to cross-examine.

10 MR. SCHERMBRUCKER: Yes, I agree.

Q. Is that your signature? (Letter before the witness). Would you read that letter out. It is dated 10th August, 1955, to Mr. Saunders.

(Letter of 10th August, 1955, to Mr.Saunders, read to the Court by the Witness - put in as Ex. H subject to cross-examination by Mr. O'Donovan.)

#### Cross-examination on Exs. G and H by MR. O'DONOVAN.

- Q. Where did you get these papers? A. A lot of these were found in various files in the City Council. Some of these come out of the City Engineer's own records.
- Q. Weren't they available before? A. I have asked on many occasions for information on these contracts to be given to me or to be passed to Mr. Saunders. Many of these are copies of originals and had been sent and the copies are not available.

#### JUDGE:

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- We are only referring at the moment to Exs. G and H. It is only G and H that have been put in evidence, no other documents.
  - Q. Where did these two particular ones come from?
    A. I am not sure where each one came from. I have collected a lot of records that come out of memo books. I should say some of those are copies, those two I have put in, are copies. The originals should be with the Engineer. They should automatically go back on to the files.
- 0. Did they come out of a memo book you kept? 40 E. I think possibly those did.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Re-examination - continued.

Cross-examination.

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Re-examination - continued.

- Q. One is numbered 39 and the other 56? A. Yes I could produce the memo book. The other letters do not refer to this contract.
- Q. Did you select these yourself? A. I took them out. They are my copies.
- Q. As a general comment, both these letters are on Parts A. B and C? A. Yes.
- Q. You could not say which particularly relates to Part B you could not specify here which relates to Part B? A. I do not specify.

MR. O'DOHOVAN: No formal application for discovery was made. My learned friend was well aware that I had asked for inspection of any papers with the City Council for this contract. They made available to me all the papers they had.

JUDGE: Any objection to these going in.

MR. SCHERMBRUCKER: I do not object.

MR. O'DONOVAN:

- Q. Did you submit this memorandum on the 19th July, to the City Engineer? (Before the witness)
  A. Yes.
- Q. And did it have attached to it a report by the Clerk of Works? A. I cannot recall whether this report .....
- Q. It looks as if it was probably attached? A. Yes, but this is a copy of the original that went to the Engineer.
- Q. This report is now attached, and it was so attached when you searched out the original papers? A. Yes.
- Q. That is where it was kept in the file of whatever file it was kept in? A. Yes.

(Memo. and annexure of the 19th July, 1956, to the City Engineer put in as Ex. 72 - read to the Court by Mr. O'Donovan.)

Q. Why did you not mention in your detailed dealing with the detailed report, this attempt at deceiving you by re-pointing the mortar in the trial hole? A. I am not sure whether I had seen it at that time or not.

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- Q. July, 1956? A. It would have been in July, 1956. I am not quite sure of the date.
- Q. On going through your files now, have you found any such complaint? A. No.
- Q. On that point? A. No. I am still hoping that some of my reports will be brought forward. The Engineer is locking for them amongst his files and his predecessor's files.

# Re-examined by MR. SCHERMBRUCKER on Ex. G, H. and 72:

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- Q. In this report Mr. Goodwin talks about a very strict inspection by you. Will you tell His Lordship, were you requiring anything above specification in that inspection? A. No.
- Q. Is it correct when he says it was too late to get this contract to specification? Did Goodwin say that to you when he was reprimanded? A. It is too late, obviously, to get all the contract to specification.
- 20 0. Did he say it to you? A. I have a recollection that something in this form of words was said.
  - Q. Was it too late to get it to specification? He says, right at the end: "My main complaint was that it was impossible to produce the work given by Mr. Mould." You say that was not above specification standard? A. Yes.
  - Q. "At this late stage ...." Would that be correct to say, in order to get it to specification at that stage you would have to pretty well re-do the whole job? A. You would.

No. 15

### EVIDENCE OF ALFRED EDWARD WEVILL

MAR. ALTRED EDVARD WEVILL: duly sworn, states:

## Examination-in-Thief by MR. MACKIE-ROBERTSON:

- O. Your full names are Alfred Edward Wevill? A. Yes.
- Q. And you are a Fellow of the Royal Institute of Chartered Surveyors? A. I am.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 14

Ronald Frederick Mould.

Re-examination - continued.

No. 15

Alfred Edward Wevill.

Examination.

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Examination - continued.

- Q. Which you have been since January 1922? A. Yes.
- Q. Are you also a Member of the East African Institute of Architects? A. I am.
- Q. And I think you were registered in Kenya as a Registered Architect? A. Registered as an Architect and a Quantity Surveyor.
- Q. Have you any scademic qualifications as an Architect? A. No.
- Q. And you have been in practice in Kenya as an Architect and Quantity Surveyor since November, 1919? A. I have.
- Q. In February, 1956, did you receive instructions to make an examination of the Ofafa Estate from the City Council? I made a preliminary examination, a cursory examination, in February, 1956.
- Q. And following that preliminary examination were you instructed to make a full inspection and detailed report? A. Yes, I was.
- Q. In pursuance of that, did you subsequently submit a letailed report to the City Council?
  A. Yes, I did.
- Q. (Ex. 61 before the Witness) Is that a copy of the report which you submitted, Mr. Wevill?
  A. Yes, this is a copy.
- Q. Would you indicate in general terms to His Lord-ship the nature of the inspections which preceded your preparation of that report? A. My instructions were to inspect the buildings with a view to ascertaining whether they conformed to the specification or, if not, to what extent they departed from the specification.
- Q. At that time one was able to see what was above ground. Were you able also to see what was below ground?

  A. A considerable number of holes were dug and we examined the sub-structure as far as we could, until we could get pumps to pump the water clear. They were mostly flooded.
- Q. Did you subsequently get pumps? A. We got pumps, and I examined them further after that.
- Q. Can you give My Lord any indication of what number of holes were dug? A. Some 50 holes.

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- Q. And, speaking generally, what did you find in those 50 holes? A. For the most part the concrete appeared to be uneven in thickness, the spread beyond the wall face varied very considerably. The concrete was very variable, thickness and composition.
- Q. What about the bottom on which the concrete was laid? A. That is extremely difficult to make a definite statement, but I would say in most cases it was laid on a decomposed rock which is found between cotton soil and a hard rock surface. In some cases there were outcrops of rock which had not been levelled, and there was no concrete under the walling at all.
  - Q. That was in the places where the rock outcrop came? A. Yes.
  - Q. Can you tell His Lordship whether this soft, decomposed, rock was sufficiently load bearing to carry the buildings which had, in fact, been erected on it?

    A. With reasonably good concrete I should say yes the load which would be superimposed in these buildings.

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- Q. Now, tell My Lord whether on your own examination and the tests which you have carried out, that you consider this concrete used to be reasonably good concrete? A. No.
- Q. Does that concrete used conform to the specification for the job? A. No.
- Q. Would you tell My Lord whether the divergence from specification is negligible, substantial or serious? A. I should say it is quite substantial.
  - Q. Have you had any opportunity of examining the hard core below the floors of these buildings?
    A. I had five holes dug.
  - Q. This was at the time of preparing the report?
    A. At the time I had five holes cut in the floors.
- Q. And what did these holes reveal? A. They revealed that the filling was very large sized boulders, with considerable interstices; and from the very fact of their being such a size it was impossible for them to be consolidated in 6 in. layers.
  - Q. I think you were present when the Court visited the site of this housing estate last week? A. Yes.

In the Supreme

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Examination - continued.

- Q. And did you there see the hole which had been opened up in one floor which the Court inspected? A. I did.
- Q. Is there any comparison between that hole and the five holes that you opened up in 1956?

  A. There was no dissimilarity at all, the filling was much the same.
- Q. I think you said a moment ago that with this type of hard core consolidation was very largely impossible? A. Consolidation of the hard core filling without the stones being broken to a smaller size and finer materials used for filling the interstices, it cannot be properly consolidated.
- Q. Can you say whether, from what you observed, there had been any attempt to lay this back fill in 6 in. layers? A. It was not apparent to me. In fact, I should say it was impossible.
- Q. Can you say, from what you observed, whether there had been any serious attempt at ramming or consolidation?

  A. No, there was no such sign.
- Q. And does back fill of this type comply with the specification laid down? A. No.
- Q. You mentioned a moment ago a need for some smaller material to be put in with the back fill. Is that required by the specification? A. It does not specifically mention it, but it is normal practice to do so, to combine stone and murram or some finer material, in a fill.
- Q. Have you got a copy of the specification with you? A. Yes.
- Q. Is there anything in the contract documents which, in your opinion, is sufficient to require the contractor to have used a small aggregate, that is back fill, in this case? A. The specification calls for a hard core "Hard dry broken stone in layers not exceeding 6 ins, and ram each layer". If each layer is rammed in itself, it consolidates it to make a perfect job of it, "small material should be added".
- Q. Would you look at para. 2 of page 1 of the specification: "Any details .... in the contract" Would you tell My Lord whether that clause could have any application to the question of adding

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aggregate to the back fill? A. In common practice, it is essential for consolidation to have smaller material mixed with the larger material.

Q. Have you the plans with you? A. Yes.

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- Q. Is there anything on the plans at all, which would indicate the adding of aggregate to the back fill? A. There is one drawing, typical section, reference No.3183/AH/2/14. The stone is shown inside and outside the outer walls, with dots indicating that there is some material between the stones, a finer material.
- Q. And as a professional man in such matters, how would you interpret that? A. That there is a mixture of stone and finer material in the filling.
- Q. Finally on this subject, could you state your opinion as to whether taking into account the documents and drawings and the terms of the general conditions whether, in fact, you would be justified in refusing to add small, fine, material in this back fill without getting a variation order for extra payment? A. I, personally, would call upon him to do so.
- Q. When you made your inspection in 1956, what did you find with respect to the floors? A. I found that in most of the rooms cracks had appeared in the concrete and the finish, which I considered was due to the bad fill.
- Q. We are now talking of the screed? A. The surface ....
- JUDGE: Q. You say cracks appeared in the concrete screed surface? A. Yes. I then had the holes cut in the floors and found that the concrete varied very considerably in quality.
  - Q. When say "concrete" now, what are you speaking about? A. The concrete underneath the screed.
  - Q. Varied very considerably in quality? A. In quality, and appeared to be very much weaker than the 1:3:6 mixture specified. The screed was of better quality.
- 40 Q. Did you examine the mortar in the walling? A. Yes.

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Examination - continued.

- Q. And what did you find with respect to that, above ground?

  A. The mortar which I tested in some cases was powder.
- Q. You say in some cases. In some places was it reasonable? A. In some places it was harder than others, but even there one could drive a nail into it quite easily. It varied.
- Q. Well, isn't it reasonable that you should be able to drive a nail into it? A. You should not be able to push a nail into it, not 1 to 4 cement mortar.

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Q. 1 to 4 is the one below ground? A. 1 to 4 below and 1 to 6 above.

JUDGE: Q. What about 1 to 6 mortar, can you push a nail into that, if it is properly mixed? How hard is it from the point of view of pushing a nail into it?

A. Well, you should not be able to.

#### MR. MACKIE-ROBERTSON:

- Q. How did you carry out your tests? What did you use? A. The foundation tests I had the water pumped out of the holes, broke off the concrete with a hammer and chisel; and the mortar in the joints I simply scraped out with a nail or chisel.
- Q. And did you take some samples for chemical analysis? A. Yes, I took 20 samples of concrete and mortar, mostly concrete concrete, screed and mortar.
- Q. Did you take these personally? A. Yes.
- Q. And are you sure that they were all taken from Part B. of Ofafa Estate? A. I took samples from all three parts, but the parts which are under discussion at the moment, of Part B, were kept separately and were packed separately and tested separately.
- Q. Well now, what did you do with each sample as you took it? A. I packed it into containers and then took it to my office, labelled it in more substantial containers.
- Q. Did you label it at all before you took it to your office? A. I labelled it on the container when I took it, on each one separately, on the site as I took it.

- Q. And what information did you put on each sample container? A. I put what it was; where it came from; and signed the label as having taken it my-self.
- Q. Then you took them to your office? A. Yes.
- Q. And you say you gave them a more permanent title? A. More substantial. As you understand, a great deal of this concrete was wet and consequently I had to repack it with more permanent material.
- Q. And did you do this yourself? A. I did this myself with my assistant.

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- Q. Were you present all the time it was being done, did you supervise it? A. I was.
- Q. And when it had been repackeed and relabelled, what did you do with it? A. It was sealed.
- Q. Again in your presence? A. Again in my presence. And I delivered it personally to the Materials Laboratory at the Public Works Department.
  - Q. And to whom did you hand the samples there? A. To the soils chemist. I forget his name.
  - Q. Did you get a receipt for them? A. I got his receipt for it. It was received by Mr. R.V.Adamson.
  - Q. What date? A. On the 22nd June, 1956.
  - Q. And did you subsequently receive an analytical report on these samples? A. Yes, I did.
  - Q. (Ex. A before the Witness.) A. Yes, that is a copy of what I have here.
- O. This report deals with samples taken from Part B and Part C of Odafa Housing Estate? A. Yes. But they were separately packaged, as you will see by the sample numbers.
  - Q. Do the items there, 1 to 19 and 40, refer to the samples which you took from Part B? A. They do.
  - Q. And in regard to the analyses shown in respect of those samples, what is your professional opinion as to the average quality of concrete and mortar? A. It was considerably below that called for in the specification, except for the screed.

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Examination - continued.

- Q. I think that in your report of the 11th August, 1956, you made reference to some pockets of black cotton soil. Do you recollect that? A. Yes.
- Q. Are you in a position to say whether these pockets were shallow or deep? A. Well, they varied very considerably. In places they went down 6, 9 ins., but it was a mixture of black cotton soil and the decomposed rock.
- Q. It has been suggested in the evidence that the only black cotton soil which could have been found in the area of any of these buildings might be such as was carried in on boys' feet, or perhaps washed back into the excavations by heavy rain. Would you accept that as explaining such black cotton soil as you found? A. It might have been sucked back by the pumps, when we were pumping out, from the surrounding black cotton soil; but I am not going to be absolutely adamant on the fact as to how it got there, whether it was there before the concrete was laid or after, but it was there.
- Q. There must have been material of some kind below the concrete when that was laid? A. Yes.
- Q. The concrete could not be laid on fresh air, could it? A. No.
- Q. And accepting, therefore, that there could have been no voids below the concrete, is it possible for your pumps to have sucked that black cotton soil into a position below the concrete? A. The substance which the pumps got out of the trenches was very much a porridge, and it is very difficult to say how much of it was really black cotton soil and how much of it was the finer of the decomposed rock.
- Q. There were examinations and inspection are you prepared to say that the contractor left black cotton soil below his foundations, or are you not? A. I am not. I never have said so.
- Q. At the time of your inspection in 1956, had any repairs been effected to the buildings since they were originally put up? A. Quite considerable repairs had been effected and were still being made.
- Q. Did you have any guidance from the City Council staff as to what work had been done by them?

  A. I was told that certain blocks had been repaired by them.

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- Q. Were you in any way confused in your inspection by the work that had been done since the buildings were put up? A. Obviously, work which had been done subsequently confused the issue as far as I was concerned, in making an inspection.
- Q. Could you tell which was original work and which was repair work? A. In most cases, yes.
- Q. Can you tell My Lord whether those samples which you took and which you sent to the P.W.D. were samples of original work or repair work? A. The samples which I sent were all from original work.
  - Q. Do you have any misgivings in your mind as to the absolute accuracy of that statement? A. If I am, I will just check up on my samples.
- Q. When were these lists made? A. These lists were made at the time the samples were taken. No, none of the samples which I took had been affected by repairs made by the City Council.
- Q. You have told us about the hard core filling as you found it the state of the foundations, the condition of the mortar in the walling putting all these things together, is there going to be any effect on the buildings? A. In my opinion, the effect of the concrete being under-strength and the variable nature of the sub-soil under the foundations, subsidence in that sub-soil would result in cracks in the concrete foundations.
- Q. And in turn would that lead to anything?
  A. Had the concrete been of proper strength, the
  risk would have been considerably reduced.

JUDGE: Q. When you say "of proper strength", I take it you mean of specification strength? A. Yes.

MR. MACKIE-ROBERTSON:

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Q. But taking the concrete as you found it, Mr. Wevill, is there going to be any residual effect?

A. The weak concrete, the weak mortar and the wide joints in the walling - thick beds and wide joints in the walling - very considerably reduce the strength of the substructure and is liable to result in quite considerable damage to the superstructure.

Q. Over what period is that likely to appear?
A. That I am afraid is very much conjecture. The

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movement of the black cotton soil will affect it. You have got the pressure from the outside of the black cotton soil. Cotton soil will expand when it is wet and create a pressure; as it dries it creates a void.

- Q. Could you try and put some figure to my question over what period are these possible cracks in the superstructure likely to materialise? A. I found a number when I made my inspection.
- Q. It has been suggested that two years, more or less, having passed since the erection of the buildings, that any cracks that might be expected will already be there. Would you subscribe to that? A. If they have not been repaired by the City Council.

JUDGE: Q. The suggestion was made that if any cracks that were going to appear, would have appeared by now? A. I do not think that even that is a foregone conclusion. It occurs over variable times, because there is no uniformity in the figures of cotton soil, or even bad walling, as far as that goes.

Q. You do not agree with that - if cracking of the wall was going to appear due to the poor workman-ship, that it would have done so by now? Do you think that defects might still come at any time after this? A. Yes.

MR. MACKIE-ROBERTSON:

- Q. Leaving black cotton out of it altogether for the moment, is there any possibility of settlement in any other way? Is there likely to be any settlement of the sub-soil below the foundations? A. I would not say, under normal conditions, that there would be.
- Q. Is there likely to be any settlement of the hardcore filling? A. Oh very definitely, yes.
- Q. Do you think that that settlement may be complete by now, or is it still possible for further settlement to occur? A. It is still possible for it to occur continuously.
- Q. For ever and a day, or for the next period of years? A. Until such time as something solidifies, and it will never solidify in its present state.

JUDGE: Q. It is liable to continue indefinitely? A. Yes, there will always be voids there, that the concrete won't bridge.

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- O. What is the result of settlement of the hard core? A. It will cause cracks in the floor the support under the floor and the floor itself cracks as it sinks.
- Q. That would affect the floors. Can it also affect the superstructure? A. In view of the fact that we have been told that the chimney stacks were allowed to be built off the concrete floor, if there is any settlement in the concrete floor which is supporting the chimney stacks, we shall have cracks in those.
- Q. You are referring now to the floors which the Court saw last week, when the chimney stack had no foundation? A. Yes.

2.15 p.m.

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Witness continues evidence on same oath.

## Examination-in-Chief of MR. WEVILL by MR. MACKIE ROBERTSON (Continued)

- Q. During the adjournment have you been able to examine the further holes that have been opened up in the floors at the contract site? A. Yes, I did, My Lord.
  - Q. How many holes did you see? A. Three.
  - Q. Other than the ones the Court saw last week? A. Yes. Rooms 204, 33 and 386.
  - Q. Will you tell My Lord what you found in these holes? A. In each case there was a rough levelling bed on top of the boulder filling which was murram and had varied from 3", 2" 4",  $1\frac{1}{2}" 6"$  in thickness. Beneath that there were large boulders with quite considerable interstices as we saw before.
  - Q. When you say as we saw before, do you mean similar? A. Similar.
  - Q. Any better or any worse? A. Certainly no better.
  - Q. The concrete in the floor was if anything apparently without a test, of better quality. There was water in two of the holes. The third one was damp but no standing water.

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Examination - continued.

JUDGE: While on the subject of water, some evidence was given earlier that this Nairobi grey stone is in fact porous and water will penetrate through it. Do you agree? A. Water will always penetrate inside. In any case it would penetrate below the foundation if there is subsoil water.

JUDGE: The fact there is water standing inside these foundations is in itself no sign that the building was bad? A. No, it is a normal condition.

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- MR. MACKIE ROBERTSON: Were you able to get at the foundations? A. The foundations as we saw them were much the same. I didn't have time to take any tests.
- Q. You didn't test the mortar for hardness? A. Yes, the mortar was again soft.
- Q. You tested it? A. We scraped the mortar with a chisel.
- Q. Did it appear to be up to specification? A. No.

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- Q. Did you get at the concrete foundations?
  A. That is what I say, we didn't have time to get down to test or examine closely the concrete foundations.
- Q. Were there indications in these holes of laying the hard core in 6" layers? A. No.
- Q. Or consolidation? A. No. The only consolidation I would say would have been was in the levelling bed of murram on top of the boulder fill.
- Q. Can you tell the Court whether these three floors were cracked floors. Cracked before these present excavations began? A. They were covered with debris. I could not see them.
- Q. We must leave that. Were there any signs of settlement in the hard core? A. No. No signs of settlement. It could have moved without it being noticeable.
- Q. You indicated this morning that in such circumstances settlement of the hard core is something which might be expected. Would you say that it is a possibility or a probability? A. It is almost a certainty.

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Q. Was there any evidence in these excavations you have just been looking at of the damp proof course? A. Yes.

Q. What grade was it? What ply was it? A. It was one ply damp course, no bed underneath it. Not bedded in asphalt.

- Q. By that do you mean bitumen as in the specification? A. The specification does say that it is to be bedded in asphalt.
- Q. If we may turn to the vagaries of black cotton soil. Would you explain to His Lordship the characteristics of black cotton soil which affect buildings? A. Black cotton soil varies according to the moisture content. If it is wet it swells and exerts pressure. If it is dry it shrinks and if anything causes tension rather than pressure.
- Q. If a building is put up on a black cotton site what is liable to happen to that building?

  A. The thing that is liable to happen is that if all the black cotton soil is not removed from inside the building is that when the soil gets wet it swells, pushes up the floors and pushes out the walls.
  - Q. And causes? A. Cracks.

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- Q. Do cracks become more evident in dry weather or wet weather? A. The action is such that the pressure caused by the swelling of the black cotton soil would be inclined to close the cracks whereas the contrary occurs when it shrinks.
- Q. The swelling is associated with which weather? A. Pressure. Wet weather.

JUDGE: I must confess as a layman I find it difficult to follow because if the swelling is going to cause the cracks surely they would be most evident .... A. If you get your black cotton soil in a confined space it must swell when it gets wet and therefore whatever is confining it is thrust outwards.

JUDGE: Isn't the crack most evident at the time of the swelling? A. There is not sufficient black cotton soil inside to create that effect. The black cotton soil is outside and the pressure is round the outside of the building, closing up, pressing in on the shell.

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Examination - continued.

JUDGE: Are you getting to the proposition that where the cracks are caused by some cause other than the black cotton soil - when they have originated for some other reason - then the pressure of the black cotton soil is tending to close the cracks up? A. No, the actual movement of the black cotton soil during seasonal changes is apt to cause cracks. Cracks may occur without any action of the black cotton soil and in these buildings it is probable they will.

JUDGE: Let us confine ourselves to cracks that may be caused by black cotton soil. There is not sufficient black cotton soil within the buildings to cause expansion inside? A. No.

JUDGE: There may be pressure from the Black cotton soil outside? A. Yes.

JUDGE: Might that cause cracking? A. Yes, particularly if the filling is not consolidated.

JUDGE: Confining ourselves to that cracking. Assuming that the cracks were caused by that pressure outside. Would those cracks be most evident when the black cotton soil is wet or when it shrinks? A. When it is present it is quite possible that the cracks will close but when it shrinks away the cracks will open.

JUDGE: If there is pressure from the outside which is tending to do that (Judge demonstrates) surely when the pressure is there the crack opens?

A. It is a wavy action. It is very difficult to describe it. For one thing, nobody can really define the vagaries of black cotton soil. It will cause cracks in that way which are transmitted to the superstructure.

JUDGE: There has been evidence before in this case which is the precise converse of yours. That the cracks will tend to close when the black cotton soil dries. I am merely trying - it is more logical that the cracks should appear when the pressure is present? A. I shouldn't like to say definitely whether the cracks are caused by black cotton soil.

JUDGE: At the moment I am dealing with cracks which are caused by black cotton soil? A. I wouldn't like to say that there are any of those.

JUDGE: You wouldn't like to say that there are any of those? A. No.

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JUDGE: Coming to the next category, cracks which have originated from some other cause. For instance, sinking of the filling, or bad workmanship. What effect is black cotton soil likely to have on that? A. None, My Lord, unles it had caused any movement in the superstructure.

JUDGE: We have possibly been pursuing something of a hare in this black cotton soil.

MR. MACKIE ROBERTSON: There is one fact that perhaps you ought to know. We have had it in evidence
that at the time the casting of the concrete foundations was proceeding, the ground was very wet, and
in fact the foundation trenches had to be baled out
sometimes, to get them dry enough for casting concrete. Well, now, does that indicate that the
black cotton soil would be at its maximum expansion
when the concrete was laid? A. If it was there,
yes.

Q. So that when the concrete was laid there was maximum support?

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JUDGE: You are asking at the moment whether it is laid on black cotton soil? A. If it isn't on black cotton soil there is black cotton soil round about. When the foundations were laid until the filling was put in there would be no pressure or otherwise from the sides.

JUDGE: The evidence was, I think, that the whole area of the building was excavated and the trenches were then sunk? A. The point I am making is that until the filling was put in the concrete foundation and the foundation wall was in fact entirely unsupported upon both sides. So that there would be no pressure exerted until the filling was put back.

MR. MACKIE ROBERTSON: Would it turn at all on the condition of the black cotton soil that was replaced against the wall if the wall had been built on the outside? A. The backfill in every case round the outside face of the walls as far as I could gather was black cotton soil and that would naturally exert pressure.

Q. The nature of the pressure would turn upon whether the backfill was wet or dry? A. And the amount of consolidation inside and out.

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Examination - continued.

- Q. Can you tell the Court whether the specification makes any provision about the backfill round the buildings? Is it provided to be black cotton or any other? A. I don't think it mentions in the specification what the backfill outside should be. But there is a drawing which shows the hard core.
- Q. That is the drawing we saw this morning. When you visited the scene this morning, did you observe any cracks? A. Yes, several.

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- Q. Minor or serious? A. I should say quite serious. One had been repaired and opened up again.
- Q. In the floor or in the walls? A. In the walls.
- Q. How high did it go up? A. It went from the door handle level right up to the roof.
- Q. Can you tell My Lord in which block this was observed? A. Three separate blocks.
- Q. Was it at one of the places you were inspecting a hole? A. I think it was in 36, 35 and possibly 29. I looked at several.
- Q. Did you examine any joints this morning? A. I did.
- Q. What results did you find? A. Any number of them anything from  $1\frac{1}{2}$ ", 2" or  $2\frac{1}{2}$ " thick, which is even worse than joints.
- Q. And the nature of the mortar? A. The mortar was very poor.
- Q. Following the submission of your report on 11th August, 1956, did you later submit any amendment thereof to the City Council? A. I amended my report at a later date after I discovered from the City Engineer that the method of carrying out repairs which had been followed in the past could not be followed in the future. They had previously carried out the repairs with their own departmental maintenance gang and they said that major repairs such as I suggested in my report, they would have to do it by contract. In consequence I said they would have to make a greater allowance for the cost.
- Q. So that your report of 11th August, 1956, was based on the work being done by direct labour? A. Yes.

- Q. And your amendment allowed for the provision of the prices to have it done by contractual engagement? A. Yes.
- Q. Here is a copy of your amended report. I tender this as an exhibit (Exhibit 1).
- Q. These two reports of yours if implemented, would achieve what? Would it bring the buildings up to specification throughout? A. In some respects it would bring it to specification, and in other respects as I have said in the report, it would improve stability.

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- Q. Improve the stability with or without achieving specification standard? A. The point is that it would not be possible in these places to bring it up to specification without total demolition.
- Q. And the figures which you give in your report for cost of implementation are the figures appropriate to what date? The date of your report? A. The date at the time I made my report which was 1956.
- Q. Have building costs come down at all since 1956? A. Today I think they are slightly down.
- Q. Would you care to put a percentage 5 per cent, 25 per cent, something approximate? A. Taking it on the basis of the superficial foot, from 60/- to probably 55/- to 56/-. I speak now of domestic work. This type of work would be very much less.

JUDGE: Would approximately the same percentage of reduction apply? Something in the nature of 8 percent? A. That would be about right.

MR. MACKIE ROBERTSON: The first item in your recommendations of your original report deals with the foundations, and you provide for the underpinning. Does that cover all the foundations throughout the whole site? A. No, only in such places as I found defective concrete.

- Q. You provide for: "Hacking up .... relaying the floors". Does that cover all the floors?
  A. Yes, every floor throughout the buildings.
- 40 Q. From what you have been able to see did you consider that that course is necessary throughout the whole site? A. From what I have seen of the state of the floors and the flooring in the places which have been exposed, I am quite satisfied that it would be necessary.

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Examination - continued.

- Q. In the superstructure walling it provides for: "raking out, etc." does that cover walls throughout or in places? A. Walls throughout. Some of them I have made allowance for their having already been done by the City Council.
- Q. The reinforcing and respiking of roof timbers. Is that to be a general measure throughout the work? A. Yes, My Lord.
- Q. And why is that necessary? A. The specification calls for framing to the roof timbers. These timbers are not framed. I don't say it is necessary to frame them but they should have been at least halved at their joints and spiked with a nail which could be clenched on the opposite side.
- Q. The specification doesn't actually say that the nails are to be clenched? A. No, it says it is to be framed.
- Q. Why do you say it should be clenched? A. To prevent the drag from pulling it out of the wood. Movement of the timber.
- Q. In your inspections, did you notice any movement of the timber? A. Some of the timbers had moved. Of course, it is green timber and it is bound to move, but this is a case where the joints had opened in places.
- Q. It has been said in evidence in this Court that the framing of timbers in these roof trusses, bearing in mind the size and dimensions specified, would have had the effect of weakening the trusses instead of strengthening them. A. Framing to my mind is a wrong expression. Framing .....

JUDGE: What was said here was that framing or halving, owing to the dimensions of this timber, I have forgotten what they were, would reduce the strength so much that it was better not to frame them. A. They were all 2" timbers and I would say that I always halve and spike them.

JUDGE: You don't agree that it would weaken them? A. I don't agree.

MR. MACKIE ROBERTSON: In your report you made a recommendation for a claim in respect of loss of rent based upon the rooms being vacated in blocks of 20 rooms at a time. Would it be possible to achieve your recommendations without the rooms

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having to be vacated? Then this loss of rent could be avoided. A. It would mean that it would take considerably longer to do the job.

JUDGE: As a matter of common sense, you couldn't pull up the floors without vacating the rooms.

MR. MACKIE ROBERTSON: Do you consider a block of 20 to be an economical unit? A. Yes.

Q. And then you made a recommendation that: "If the repair .... cover this risk". By which recommendation you are suggesting that an extra a per cent maintenance should be claimed from the contractors. How did you arrive a per cent.

A. It was an attempt at an intelligent guess, My hord.

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- Q. Do you consider  $l\frac{1}{2}$  per cent would not adequately cover the maintenance? A. Not for this class of work. This class of user.
- Q. Now Mr. Wevill, if your recommendations were not carried out, would the works as they were left by the contractor be up to the value which you would anticipate from having read the specifications?
  A. No.
  - Q. Can you give the Court any indication of the value that you would expect to find in the contract buildings as a result of the contract documents and specifications?

    A. May I ask if that is intended what would I value that work at had the specification been followed.
- Q. Had the specification been followed. Yes.

  A. My valuation of the work would be £100,000 to £110,000.
  - Q. Whereas the tender was approximately £85,000? A. I believe that was the contract sum.
  - Q. Knowing that was the contract sum do you still think the value should still have been £100,000 to £110,000? A. I cannot see why because he has under estimated he shouldn't follow his specification.
- Q. You think that the contractor has under-estimated? A. On my figures I reckon he has.
  - Q. That is the value that you put on the specification, so to speak. Are you in a position to give the Court your opinion of the value of the buildings

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Examination - continued.

as they were left by the Contractor? A. The only way I could arrive at any figure would be what I consider the capital cost of the extra maintenance. That I think, My Lord, is the only way I could arrive at any figure. And I should say it would probably be three times as much.

- Q. Three times as much as normal? A. About  $3\frac{1}{2}$  times instead of  $1\frac{1}{2}$ .
- Q. This is always assuming that your recommendations have not been carried out first?
  A. Precisely.

JUDGE: You say about three times the normal rate? A. Yes, I hope it is an intelligent guess.

JDDGE: And does that mean that you are not in a position to estimate the capital value of the buildings as left by the contractor?

MR. MACKIE ROBER TSON: I am coming to that. Have you endeavoured to ascertain how that would capitalise out? A. Yes, I have. I have got figures from the City Treasurer based on the formula which I followed.

Q. I have got a schedule here which has been prepared in the City Treasurer's Department. I have shown a copy to my learned Friend. If it is complicated can we call a member of the City Treasurer's Department?

MR. O'DONOVAN: I agree, subject to my being able to understand it.

JUDGE: What did you describe this as, Mr. Mackie Robertson? A. A statement showing the capitalisation of the maintenance cost, and it is done in per cent grades, My Lord. To show the Court how it .....

JUDGE: This had better go in as Exhibit J.

MR. MACKIE ROBERTSON: Using that table, Mr. Wevill, you gave a figure of 4½ per cent as for the maintenance costs. If we work from that what would be the capitalised figure using your estimate of £110,000?

A. The capitalised figure would be £76,279.

Q. Which would leave from your original estimate of £110,000 a residue of what? A. £34,000.

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Q. And if, instead of your figure of £110,000 we work on the contract price of £85,000 what does it come to? A. £58,943.

Q. Which would leave a residual balance of about £26,000? A. Yes.

Q. It has been said in the course of evidence that the value of materials contained in this site when demolished might be about £60,000.

JUDGE: I thought it was less.

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10 MR. O'DONOVAN: I thought it was for all three blocks.

MR. MACKIE ROBERTSON: It was in a report by Mr. Mould. I think it was £60,000 for Part B. My Friend is right. Exhibit E. It is in paragraph 3(2) "Is it worth .... could be re-used". It refers to a total of £180,000 - £60,000 covers the whole lot. Leaving Mr. Mould's estimate aside, there is obviously some value in the bricks and mortar as they stand. Do you consider that that relates in any way comparable to the actual figures? A. In work of this nature probably the value of material, new, to the value of labour is very nearly 50/50. It might be 40 labour and 60 material, but it must be taken into consideration that this material has been used and a lot of it could not be re-used. Timbers could probably not be re-used.

Q. Having considered the arithmetical side of the matter, and taking that into account together with your own professional experience and your knowledge of the building as it stands. What do you consider would be a fair figure roughly? A. Taking ..... If the buildings were demolished, taking my own £110,000 as value, at a very approximate guess I should say that the value of reusable materials might be £40,000.

JUDGE: I don't think that actually was quite the question.

MR. MACKIE ROBERTSON: And if they were not demolished, taking them as they stand when the contractor left... You have considered the figure side
of it produced by the Treasurer's Department. You
know the practical side. A. I should say my
estimate less the cost of the sinking fund.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Examination - continued.

Cross-examination.

Q. You think that is a way of arriving at it? A. The only possible way I can think of.

JUDGE: That is, in fact, £34,000? A. Approximately.

JUDGE: And would you say that was the approximate value of the buildings as left by the contractor? Rather than taking my figures which are some £40,000 for repairs plus the } per cent extra maintenance.

MR. MACKIE ROBERTSON: My friend suggests there may be some confusion. The depreciated value is £110,000 less £76,000, that is £34,000. A. Yes.

JUDGE: That is what I understand. I understood he was capitalising the value. As I understand it that £34,000 is what Mr. Wevill said would be the capitalised value of the buildings as left by the contractor.

#### Cross-examination by MR. O'DONOVAN:

Q. You have very considerable experience. How many years? A. 38 years in this country, 6 years in South Africa, and some 10 years at home.

Q. Half a century? A. Yes.

- Q. In your 50 years of experience have you ever struck any case where defects on this scale are advanced in respect of a building which has been almost completely paid for? A. I wouldn't allow it to occur in any of my buildings.
- Q. It is unique? A. Yes.
- Q. The criticisms you have to make must have been quite obvious to a clerk of works? A. Not necessarily. The contractor should be ashamed of himself.
- Q. Would they not have been partly obvious? To the Contractor and the architect and the Clerk of Works? A. Yes. If he is living on the job.
- Q. This table you have put in starts off with the parase: "Present value ...." Do you understand it? A. I did not calculate it.
- Q. Do you understand it? A. Yes.

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- Q. That is only the present value? It is therefore a fluctuating value? A. I don't know.
- Q. What is the meaning of the word "present"? It is based on something comparable not expressed in this document?  $\Lambda$ . I don't know.
- Q. You don't understand it? Let us be honest. You don't understand it? A. I am not an actuary. I see how it is worked out.
- Q. You don't want to admit that you don't under-10 stand it? A. I do understand it.
  - Q. What does the word 'present' mean? A. It means exactly the same.
  - Q. You know perfectly well what I mean. Do you understand it? In other words I think 'present' could be left out. A. Its value .....
  - Q. Specifications over-ride drawings, do they not? A. They are taken together.
- Q. Which over-rides the other in case of a conflict? A. That is for the architect to say. If the contractor finds any discrepancy between drawings and specifications he refers to the architect for a ruling and takes the architects ruling.
  - Q. In this case, I see that the architect for Plan B was Mr. Tanner. So presumably he knew better than you do, Mr. Wevill, the meaning of this rather obscure .... (inaudible) which he put in the hard core filling? A. I have only used my common sense in interpreting the plan. My Lord.

JUDGE: Which plan? A. 3183/AH/2/14.

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- MR. O'DONOVAN: Would you agree that Mr. Tanner, who drew this plan, probably knew more than you do about the meaning of the dots which he drew in the hard core filling? A. Yes, if he has got any statement to that effect I should like to hear what it is. It is obvious to any draughtsman what it is.
  - Q. If he declined to authorise the use of any finer material to fill in the interstices on the ground of economy, what would you say? A. I would be extremely surprised. My Lord.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued. Q. Do you say that there should be any filling outside the foundation wall? A. On this drawing it isn't shown.

- Q. Did you complain in your report about there being no filling outside the walls? A. Only to the effect that there should be filling outside to give support to the drains.
- Q. That is a fact which must have been obvious to the architect and Clerk of Works? A. It all depends, it might have been filled in in his absence.

Q. Would you deal with the subject of black cotton soil? Let us take the case first of black cotton soil underneath the building. Not surrounding it. Underneath it. Would you confine your attention to that place?

Is there any point in pursuing this black cotton soil because this witness has said he would not be prepared to say whether there was any black cotton soil.

MR. O'DONOVAN: He still claims } per cent. Ιt affects part of his estimate.

JUDGE: If you wish to pursue it, do so. But as I understand it he has said he is not prepared to say there was an appreciable amount of black cotton soil left either below the foundations or the filling.

MR. O'DONOVAN: I want to cross-examine him in how it affects other things. I will deal with it very briefly, if you agree. If it is underneath you say the effect is to thrust the building up so that it will appear to burst outwards? there is sufficient of it, yes, I would .....

- Q. That is not the case? A. I have not said that.
- Q. What you are saying now is that this is surrounded by black cotton soil. Is that right? So that when the black cotton soil gets wet it will tend to squeeze the building in. Is that right? A. Yes.
- Q. Is that the first case of this kind in your 50 years' experience? A. I have seen it act both ways both from inside and outside.

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- Q. But the squeezing in of the building would tend to thrust the floor up. It would break it?
  A. No, because the filling under the floor is not sufficiently well consolidated. The walls would go but not the filling.
- Q. What about the screed? A. If the squeeze is .... the squeeze is underneath the floor. The black cotton soil is underneath.
- Q. In other words, it cannot produce a crack at all? A. By weakening the wall .....

JUDGE: You are saying it would produce cracks in the walls but not cracks in the floor.

- MR. O'DONOVAN: Did you make a remark when you were at the site when the Court visited it. Did you make a comment that the cracks in the floor were not visible because the black cotton soil being wet it closed them up?

  A. Never.
- O. Did you hear that remark? A. I did hear some remark.
- 20 Q. By Mr. Mould? A. I don't think it referred to the floors. It was only the walls.
  - Q. I don't think Mr. Mould had any idea of your new theory about black cotton soil when he said that? A. I wouldn't know.
  - Q. The pressure of black cotton soil from the surroundings of the building couldn't cause any sinking of the foundation, could it? A. It would be .....
  - Q. It couldn't cause any subsidence? A. It shouldn't.
- 30 Q. It couldn't. A. It shouldn't.

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- Q. You don't anticipate that it would? A. If a .... is pushed in it occupies less space than when it is in its normal condition.
- Q. So your conclusion in your report you wish to abanden, do you? I will read it to you. "The subscil ..... underpinning it". Do you abandon that? A. No, you have missed out an important part. I said: "Due to defective concrete ..... due to movement". It would have been bridged in decent concrete.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued. Q. Will you look at page 1 and page 2 of your report? You deal first with excavation. Secondly, with concrete foundations. May we confine our attention first to excavations? The excavations as such do not render any underpinning necessary, do they?

A. The excavations left a mixture of black cotton soil with the finer decomposed rock. It would probably be necessary if any subsidence occurred. It would be in these points that the subsidence would occur and that is where underpinning is necessary.

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- Q. Where the subsidence would occur? You didn't see any? A. It was impossible to see anything there was so much water about.
- Q. You are not suggesting that the excavations were not according to specification? A. I am, My Lord, because the specification calls for excavation down to hard rock. This is not hard rock.

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- Q. Doesn't the specification say: "Excavation down to rock or murram suitable for foundation". A. You will find in another place it says: "hard rock".
- Q. I am referring to the specification which you quoted. A. "Trenches for foundation ...... murram bottom". There is no murram on that site, My Lord.
- Q. Do you expect any settlement then of the foundations? A. Settlement might occur due to bad concrete.

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- Q. Do you expect any settlement because of the excavations? A. Yes.
- Q. When, in another 50 years' time? A. Not being the architect of the universe I cannot prophesy that.
- Q. You cannot prophesy when? A. When the subsidence will occur.
- Q. Wouldn't you expect the effect to occur when the cause exists? A. Yes, when the cause exists.
- Q. And the cause has existed for the past two years during two rainy seasons? A. It has been extremely lucky up to now, in my opinion there are cracks.
- Q. Were you invited to point them out when we visited the site? A. Yes.

- Q. You immediately replied that they had all closed up because it was wet. A. I beg your pardon. I stated I would not be prepared to take the court to where these cracks were because the majority of them had already been repaired.
- Q. Have you any notes where the cracks were?
- Q. Have you notes? A. I have
- Q. Which you made at the time of your inspection?
  10 A. Yes.
  - Q. Last year? A. Yes.
  - G. In the rainy season? A. Just after the rainy season.
  - Q. You said the site was waterlogged then? A. Not all of it.
  - Q. Did you say the site was waterlogged? A. I said water was found in the foundations to a considerable depth.
- Q. Was it very much like the site when we visited it this week? A. In those places we went to see it was, where there was water.
  - Q. How many holes did you dig to examine the foundations? A. 49 or 50.
  - Q. How big was each hole? A. Some of them were trenches which went the full length of the building. I have a diagram.
  - Q. How many feet were exposed of the foundation? A. No place less than 3 ft.
- Q. And the total? A. The total footage exposed?

  30 It will take a lot of calculation.
  - Q. Can you answer another question more easily? What proportion of the total foundations did you examine? A. I should say about 25 per cent. 25 30 per cent.
  - Q. With 50 holes? A. 50 holes and trenches. There were several trenches.
  - Q. How many trenches? A. In two places. Along the whole of one side of the building

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued. Q. The whole of one side of the building. In two places slightly less than half the building was exposed out of 1.7 blocks, and 50 3 ft. holes were dug. One of your not so intelligent guesses. Would it be correct to say that you actually examined an infinitesimal proportion of the foundations?

A. I would say ....

JUDGE: Answer the question. A. I have said that we examined sufficient to give us a fair cross-section.

MR. O'DONOVAN: I didn't ask you that question. I asked you what percentage? A. I haven't calculated it My Lord, and I cannot answer the question.

Q. What is the length of a block where you exposed the whole length? A. 260 ft.

JUDGE: In each case? A. In one case 260 ft. and the other 200 ft.

MR. O'DONOVAN: 460 ft. and 50 holes 3 ft. long, about 150 ft. 150 plus 460, that is 610 ft. That is not very difficult is it? You exposed 610 ft. of the foundations? A. That is probably correct.

Q. There must be about 8,000 running feet? A. I would say so.

Q. There are 17 blocks each of 8,000 ft. You examined about six out of 8,000. Less than 1 per cent. I am serry, less than 10 per cent, about 8 per cent? A. I don't know what the total length of the walling is. I merely say we got samples of the total length.

Q. Do you say any cracks were caused by this squeezing in of the black cotton soil? A. I cannot say, the cracks are there.

Q. Do you anticipate cracks from any black cotton soil? A. There again, the vagaries of black cotton soil .....

Q. You cannot possibly tell whether cracks were due to black cotton soil or whether any further cracks will be caused by it. So we can forget about black cotton soil. A. Only in so far as the foundations are concerned.

Q. Why is underpinning necessary? A. Because there is uneven resistance .... The subscil is of

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uneven bearing capacity, My Lord, and the concrete and walling on top are of not sufficient strength to breach the weaknesses.

- Q. If one went back next year and still there were no signs of cracking, that would leave you quite unconvinced. And if we went back a year later, or a year later, you would still stick to your theories, would you? A. I am not going to answer ...,
- Q. If in a year's time there were no signs of settlement would that affect your theory? A. No.
  - Q. Two years' time? A. No.

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Q. Ten years' time? A. If a building is badly built ....

JODGE: If a building is badly built it may not affect its specified life but it is still badly built.

MR. O'DONOVAN: Did you in your report say - I am reading from page 5: "No matter .... dug out". Do you abandon that? A. The emphasis is on the filling.

- Q. The black cotton soil doesn't need to be taken out? A. Very definitely.
- Q. It doesn't necessitate the taking up of the floor by itself? A. The bad filling is what necessitates the taking up of the floor.
- Q. The black cotton soil doesn't require this operation on its own? A. No, but if you are taking out the filling you might just as well take out the black cotton soil.
- 30 Q. If it is there. You said that the mortar was variable in the foundation walls? A. Yes.
  - Q. Presumably part of it? A. Yes.
  - Q. Do you consider the concrete foundation is adequate having regard to the load it would take? A. If it was properly mixed. The present concrete is not.

JUDGE: You are referring to the concrete foundation which is actually allowed in the specification.

MR. O'DONOVAN: Did you not say this about the concrete foundation: "Although it might ... points of settlement will occur ...."? (page 2) A. Yes.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

- Q. So that the concrete foundation by itself you regard as sufficient, do you? A. No, I don't say that. As a levelling bed for a solid base.
- Q. A foundation or a levelling bed still performs the same function does it not? A. Not necessarily.
- Q. The building rests on it. You say the remedy is underpinning. Underpinning where? A. Where the concrete .....
- Q. "Cutting out and replacing soft concrete"? A. Yes.

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- Q. It doesn't all require to be redone, only those parts that are soft? A. That is what I suggest.
- Q. Cut out the bad bits? A. I am of opinion that this building is sub specification.
- Q. You have said so. Do you suggest only replacing the bad portions? A. With the object of saving time and money.
- Q. Did you say the only remedy is cutting out the soft concrete? A. Demolition would be better.

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- Q. Mr. Wevill, you may be years my senior, but would you kindly answer my question? A. What was the question.
- Q. Did you say the only remedy was cutting out the soft concrete? A. Of course, it is true.
- Q. That involved cutting out how many feet of concrete in the 600 odd feet you saw? How many feet would have to be cut out? A. 31 places, 4 ft. long.
- Q. What does it cost to cut out per foot? A. About 30 cents a foot.

- Q. And the total number of feet? A. 120 ft. length.
- JUDGE: 30 cents per foot length or cubic foot? A. Yes.
- MR. O'DONOVAN: And how many cubic feet? And then there is the concrete in the underpinning itself.
- Q. How many places did you find it was necessary to underpin? A. 31.

- Q. What did the underpinning cost in each case? A. 1270/-.
- Q. The total of that work is about £75? A. As I said, I haven't made a big point of the underpinning.
- Q. In how many places did you think the foundation wall had to be repointed? A. The whole of it.
- Q. You didn't say the whole of it? A. No.
- Q. How much of what you saw had to be repointed?

  10 A. From what I saw I thought the best thing would be to expose it all and repoint.
  - Q. If on exposing it all it seemed to be unnecessary wouldn't it be wasteful? A. I suppose it would, but there is no question of it from what we saw of the mortar.
  - Q. The safest thing? A. My Lord, this pointing is very largely to make up for the lack of bond.
- Q. What does it cost to repoint? A. Externally it would probably cost about 11 cents a square foot, and internally about 16 cents a square foot, the reason being difficulty of access. But the excavation has got to be done to get at that.
  - Q. What would that cost, the total amount of walling that had to be repointed? A. I have taken it on the total. I haven't taken it on the portions which we exposed. I took the portions of which we exposed as being a fair sample of what we got.
- G. You said that your costs were based on putting right only what you observed to be defective?

  A. I think My Lord, I said what I considered to be defective.
  - Q. How do you get Sh.39,000? Can you explain that? "Excavating for underpinning ....."

JUDGE: Do you think we might have them in the morning in the form of a list.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

9th July, 1957 10.30 a.m.

Evidence for the City Council of Mairobi

Witness continues evidence on same oath.

No. 15

cross-examination of Witness ALFRED EDWARD WEVILL by MR. O'DOMOVAN (continued).

Alfred Edward Wevill.

Q. Mr. Wevill, in your estimate of the cost of repairing the foundations I see that the largest item is concerned with excavating and back filling the walls with hard core. A. I have not my copy of that statement, I handed it over ....

Crossexamination - continued.

JUDGE: Is there a spare copy to be handed to the witness?

Q. Would you agree that that item accounts for over Shs.21,000 out of the Shs. 39,000?

JUDGE: What is the item - excavating and back filling with hard core - that is excavating on the external face? Witness: A. I don't know My Lord, I have not got those papers in front of me.

JUDGE: Could you hand it up?

MR. O'DOHOVAN: I am not trying to catch you out Mr. Wevill.

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JIDGE: I am sorry, what is the answer? MIL. O'DONOVAN: It accounts for Shs.21,193/20.

Witness: I believe Counsel, for the outside of the walls I am not certain of that. I cannot say.

MR. O'DONOVAN: I will read it out correctly - "Excavate entirely face of walls to expose face and back filling with hard core Shs.21,193/20. A. It is in my statement, I accept that.

JUDGE: Out of a total of Shs. 39,000.

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MR. O'DONOVAN: To what extent would that item be reduced if no hard core - if no back filling with hard core were put in? A. It would have to be back filled My Lord. Probably the value of the hard core would be about five cents a foot. I have not got the measurements in front of me.

MR. O'DONOVAN: Very well.

Q. Would a Clerk of Works who was ordinarily conscientious have been well aware - should he have been well aware of the quantity and quality of the

mortar put in the foundation walls? A. Not unless he was constantly on the work.

JUDGE: The evidence is that he was on the work about a third of his time. He was dividing his time between this and other work - several hours a day. A. A lot of mortar can be used and mixed in the time he was not on the work.

JUDGE: On the basis of his spending about a third of his time there, should he be aware of the type of mortar that was going in? A. He should be, yes My Lord.

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MR. O'DOMOVAN: It is very easy to test is it not. What the Clerk of Works described as field tests - prodding the mortar with a knife etc? A. It should be possible to check it that way, My Lord.

Mł. O'DONGVAM: This is not what you so described as a hidden defect then? To some extent yes it is hidden.

- Q. To what extent? A. To the extent of it having been done and covered up in the absence of the Inspector.
  - Q. The Clerk of Works do you mean when you say "Inspector"? A. Yes.
  - Q. Normally it would be the Clerk of the Works' duty would it not, to reject all work whenever he saw it? A. Yes. My Lord.
  - Q. In that respect he was actually the Deputy Engineer? A. The Clerk of the Works' duty is to act as Inspector for the Engineer.
- 30 Q. He deputises for the engineer? A. Yes.
  - Q. That is the normal procedure. A. Yes, My Lord.
  - O. And it applies also in this particular contract.
    A. I would definitely say so.
  - Q. What do you mean by work being covered up?
    A. In foundation work very frequently filling is put in after walls are built and are thereby covered up and hidden.
- Q. What do you mean by filling? A. Back filling which you spoke of.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

Evidence for the City Council of Mairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

- Q. But here there is no back filling? A. Some would be necessary for the trenches My Lord.
- Q. That is after the wall is completed surely? A. Not of necessity.
- Q. It is not of necessity they should be covered? A. It is necessary.
- Q. Why? A. You can't build a wall and leave an empty trench alongside the built wall.
- Q. Why not? A. It would be very foolish to do so. Anybody could fall into the trench. When you have built your wall you fill back the trench.

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- Q. The Clerk of the Works has said he was there about three hours a day and when he came he was able to see the work which had been done? A. It would have been possible it is very difficult.
- Q. You say it is very difficult for you to say that the Clerk of Works would undoubtedly be in a position to see? A. He should be, yes.
- Q. And you would find nothing startling about his statement that on an inspection of three hours a day, he was able to see all the work being done?

  A. I think he would be extremely clever man to see all that is done if he is working three hours and they are working eight hours.a day.
- Q. Then at least he would see the quality of the mortar put in whilst he was there? A. Such as was put in whilst he was there.
- Q. And would that be insufficient for him to form an opinion or conclusion on the mortar. He must have seen a third of it being put in. A. I took tests haphazard My Lord, from what I saw I formed an opinion.
- Q. And if you based it on examination of about six hundred feet out of a total of eight-thousand or more, surely he was in a position to say what the quality of work was whilst at least a third of it was being completed in his presence. A. I based my opinion on the strength of the chain being in its weakest link.
- Q. You have got your own way of answering my questions. A. The difference being, My Lord. I have had practical experience whereas my Learned Counsel has not.

Q. Your experience presumably does not cover the field in answering questions directly. A. I am not a lawyer.

JUDGE: Yes, well, will you please enswer questions directly.

MR. O'DONOVAN: Now the actual underpinning which you allow for the foundations. The two items 253/25 for the excavations and Shs.1017 for the concrete? A. I believe that is right my Lord.

10 JUDGE: This document is not in evidence?

MR. SCHERMERUCKER: May I suggest we put it in?

MR. O'DONOVAN: There are only one or two items.

JTDGE: What was that last item you referred to?

HR. O'DONOVAR: Underpinning Shs. 253/25 and concrete for the underpinning Shs. 1017/-.

- Q. Your figure for the floors includes all the floors does it? A. Yes My Lord.
- Q. How many floors did you actually examine? A. Pive, plus the three which I saw yesterday.
- 20 Q. That is eight altogether? A. Yes five previously and three yesterday.
  - Q. The total number of rooms is here is an extra copy how many rooms are there in all? A. I am afraid I have forgotten that My Lord. I suppose there must be some hundreds.
  - MR. O'DONOVAN: I leave it at that some hundreds.
  - Q. Would you agree 428? A. That is probably correct My Lord, I cannot say for sure.
- Q. And you approved them for filling with hard core? A. To all of the rooms.
  - Q. That is new hard core is it? A. Hard core broken to specification.
  - Q. But you did not take into account the existing hard core or did you? A. I would definitely say so. I have taken into consideration the value of the old material which could be re-used.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

- Q. Where? A. In filling.
- Q. What is it worth? A. I have put it down here at twenty-five cents a cubic foot.
- Q. Is that the cost of hard core as you buy it? A. No.
- Q. What is it? A. I cannot say My Lord, somewhere about ten cents.
- Q. Is what hard core costs? A. Approximately ten cents a cubic foot.
- Q. You said fill back with hard core and you are charging twenty-five cents per cubic foot?
  A. The labour must be allowed for.
- Q. How much labour? A. Ten-fifteen cents, but what is to be taken into consideration is the inaccessible position of the work. Accessibility would make a very considerable difference between the cost of new and the cost of reinstalment.

JUDGE: What do you mean by accessibility? A. They have to get into the rooms which is in a confined space.

JUDGE: You mean that entrance is now only through a door way as opposed to the original filling having been opened all the way round? A. Yes.

JUDGE: I follow.

MR. O'DOHOVAH: You should calculate twenty-five cents per cubic foot in filling back with hard core. A. Yes in my estimation.

- Q. And you have charged the whole of that based on ten cents for the material and fifteen for the labour? A. I have not analysed it My Lord, that is approximate a reasonable analysis.
- Q. Where did you allow for the value of the existing material? A. The cost of breaking up the existing material to the approved size would compensate for the extra labour.
- Mi. O'DONOVAN: Perhaps we are at cross-purposes.
- Q. You have drawn up an estimate of re-doing these floors and foundations to the buildings the fill-ings under the floors. You have listed item by item what it would cost to rebuild all these floors.

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You have charged amongst other things, twenty-five cents per cubic foot for filling back with hard core. That would be the cost would it not, if you were going to fill back with hard core, if there was none there in the first place? A. I am being asked a question, Sir, My Lord, which I have based all my calculations on schedule rates for work that is being carried out.

JUDGE: The point is this; Counsel is trying to find out whether the cost that you put down there is the cost of filling with hard core back on the basis of there not being any hard core present - new hard core? A. I have based it on a schedule rate which I have in my office....

JUDGD: That would be for fresh hard core being brought in? A. Yes.

JUDGM: And the point Counsel is getting at, I think, is the existing hard core which no doubt would have to be taken out and put out - why could that not be broken up and brought back into the room?

A. Because of the extra work entailed.

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JUDGE: Would not any new hard core being brought to the site have to be broken up also? A. Not if if already bought to the right gauge, My Lord.

IR. O'DONOVAH: You described this filling ... You say the fundamental important defect is the filling? A. That is the case.

- Q. Fundamentally is that there is no finer material in the interstices to add it? A. It is too large.
- 30 Q. There is an absence of finer material?
  A. There is no finer material to consolidate it.
  - Q. Is that the important aspect in which it is wrong? A. The important aspect is that it cannot be consolidated.

JUDGE: What we are trying to find out is which is the more important aspect - the fact that these were very large blocks or the fact that there was no small filling between? A. The only corollary is one to the other but even with filling to the interstices it could not be consolidated with such large pieces of stone.

IR. O'DONOVAN: What is the maximum should have been used do you think? A. I personally specified broken to parts of three inch mesh.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

crossexamination
- continued.

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

- Q. That is not specified here? A. No.
- Q. There is nothing here to prevent a two foot boulder being used? A. If it can be rammed in a six inch bore, no, My Lord.
- Q. There is a preliminary clause regarding words normal and practicable in the instructions I think you will see it in the specification My Lord.
- Q. You mean 'any details that are fairly and obviously intended that is a matter of a rather different interpretation isn't it? A. No, I should not think so.

Q. Do you think experts are always unanimous? A. No, very definitely not.

- Q. So very much will depend on the opinion of the supervisors? A. The opinion of the experts.
- O. What have you got to say of the experience of Mr. Stone? A. I am afraid I don't know Mr. Stone.
- Q. In fact it is unheard of, is it not, that these sort of criticisms should be brought forward at this stage after the building has been completed? A. I don't quite get that.
- Q. It is unheard of that in a contract where there was such close supervision as apparently there was in this case, that these sort of criticisms should arise at this stage it should have been dealt with when the filling was put in, should it not? A. Oh yes, My Lord, it should have.
- Q. Now, the superstructure walling there could have been no cover up there could there?
  A. Should not have been possible to cover it up.
- Q. Would it have been possible to cover it up? A. Only by pointing only where it has been pointed.
- Q. Not otherwise. Even where it is pointed it is very easy for a Clerk of the Works to test? A. Oh yes.
- Q. In fact it is an important feature of the work of the Clerk of Works? A. Not unless he considers it necessary I would not test it if I was satisfied.
- Q. If you were satisfied? A. If I was satisfied.

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Q. I do not wish to go through your report in detail Mr. Wevill as you were not asked for it in detail in the Examination-in-Chief.

JUDGE: Exhibit?

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MR. O'DONOVAN: A. Six My Lord.

- Q. The inside walls those had to be dressed to a fair face? A. That is what is specified.
- Q. You would agree with me that what is a fair face is a matter of opinion? A. No, My Lord, I should not. I should say a fair face is a fair face.
  - Q. That is probably an unassailable proposition does it get you anywhere. A. It gets me down to a fair face.
  - Q. Where is the dividing line, can you express it in mathematical terms can you say for instance what size or shape of projection expressed in fractions of an inch or angles assess to be a fair face and what assesses to become a rough one?
    A. A rough face has projections on the stones and

A. A rough face has projections on the stones and hollows My Mord - a fair face is a uniform flat surface.

- Q. There are projections on every surface aren't there? A. Not on a fair surface.
- Q. On every stone surface? A. No not if it is dressed fair.
- Q. Oh! So your point is this then is that every architect should know exactly what a fair face is? A. Well may I add the finish and the last paragraph of that which says 'cement mortar is not to be used ...
- O. Is your point that everybody should know exactly what a fair face is? A. Every experienced practical man should know My Lord. I know sufficiently well to define that this has been levelled off for cement My Lord.
- Q. That was obvious was it to the Clerk of the Works, it must have been? A. I might say that some of this has been done subsequently.
- 40 JUDGE: Let us confine ourselves to what the contractor did.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued. MR. O'DOMOVAN: In fact, levelling off for all plastering is more expensive isn't it, A. Yes but not so effective.

- Q. Will you define a fair face now? A. I have done so I believe My Lord.
- Q. You have said a fair face..? A. An even face without projections.
- Q. You think even that is not a matter of opinion?
  A. I don't know what Learned Counsel is getting at
  but I certainly say there is no question of opinion
  as to what is a fair face and what is a rough face.
- Q. I will tell you what I am getting at in plain words. Is it possible for one architect or clerk of works to accept a standard of work and for you to disagree with it?

  A. I should disagree with it.
- Q. You mean you are right and everyone else is wrong? Do you agree it is a matter of opinion? A. It is very much a question of sight My Lord. Can you see a rough face or can't you see a rough face.

ME. O'DOHOVAN: I give up.

- Q. Would you be able to classify all your criticisms into two categories; that is to say the hidden defects and those which must have been patent?

  A. Yes. Yes My Lord, I would.
- Q. Would that classification be those .... Would you agree that, apart from the mortar in the foundation walling which might have been put in while the clerk of works was not there and covered up before he returned, that he should have seen everything else? A. I think, the only way I can answer that question is to say that pointing on the walls on the mortar joints of the walls would disguise a lot of the uneven surfaces which I have reported. The size and shape of the stones with the joints.
- Q. Well let us try and get it in a way acceptable to you Mr. Wevill. Would you agree that he would have seen everything else?

JUDGE: As a practicable proposition whether a Clerk of Works is spending two or three hours a dcy on the site could any one be covering up all the joints by covering, by pointing during his absence? A. It is a big area and it is quite

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possible for work to be done in one section of the work while he is inspecting another. I am not defending the Clerk of Works.

JUDGE: I am not asking you to defend him. I am asking this. As a practical proposition is it practicable for covering up to be done by pointing so that he would not know, would not be aware of, what was going on? A. It would My Lord.

JIDGE: Surely he would see the size of the joints?

10 A. If a contractor wanted to do it he could.

JUDGE: I don't say he wanted to do it - it is possible that work can be hidden on an area like that in the absence of the Clerk of the Works?

A. It remains My Lord that has been done.

Mi. O'DONOVAN: What? A. Defective work.

JUDGM: The point now is whether the Clerk of the Works would or would not have been aware of the general standard of the work that was put in. A. He should My Lord.

- 20 M. O'DONOVAN: He must have been aware? A. I would say that if he was doing his job he would not have passed it.
  - Q. Would you try a rather more direct answer now? A. I am not going to criticise the Clerk of Works.
  - Q. Do you agree he must have been aware of the general standards of the work. A. No.

JUDGE: If he was doing his job properly, on the basis of spending three hours a day there, must he have been aware of the standard of the work?

A. He should have been there eight hours a day.

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JUDGE: Would you answer the question directly. Should he have been aware of the general standard of the work? A. The general standard of work, Yes My Lord.

MR. O'DONOVAM: Now with regard to the superstructure concrete it is quite easy to test its hardness by simple field tests is it not? A. Yes,

Q. And did you not - and Mr. Mould - give a demonstration in that when the Court visited the site?

40 A. I was not there, I did not notice any testing on the superstructure.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

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Alfred Edward Wevill.

Crossexamination - continued.

Evidence for the City Council of Nairobi

No. 15

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Crossexamination - continued.

- Q. You did not see various people digging it out that would indicate whether it is soft or not?
  A. Yes.
- Q. Would you try to see if you can state that you agree with the division of your criticisms into latent and patent defects. You say part of the foundation mortar might have been put in while the Clerk of the Works was not there and you would describe that as being a hidden defect is that right? A. Yes.
- Q. Would you agree that nothing else should have been hidden? With the Clerk of the Works doing his job three hours a day? A. No I should not say that. Mortar can be mixed in half a dozen machines in half a dozen parts of the site and the Clerk of the Works could not see what mixture was going into every machine.
- Q. How much of the mortar of the superstructure have you tested? A. It is very difficult to say My Lord. I tried practically every block. I dug my chisel in two or three places.
- Q. In what area? A. All of the areas except those which have been repaired by the City Council.
- O. How long did that take you to do? A. I was on the work about three weeks.
- Q. That particular feature of it? A. I was investigating other things at the same time.
- O. You did not test all the mortar, obviously you cannot? A. It was an impossibility.
- Q. You can only test its hardness with a knife here and there? A. Yes.
- Q. You decided on the surface of those walls?
  A. I have previously said I go on the weakest link in the chain. That is why I say what I decided on was a reasonable sample and reported it. I found the weakest links and based my report the way I did.
- Q. You think the Clerk of Works must have been aware in the course of supervision over months and months what you were aware of over three weeks? A. He should have been My Lord.

JUDGE: Can I just interrupt - I don't know whether you are coming to this point - the bad mix, assuming that there was a bad mix, in the cament could

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presumably have occurred in one of two ways. could either have occurred by deliberate reduction of the cement content or it could occur by inadequate supervision of workmanship with weak mixes being put into the mixer. In some cases there might be a weak mix going in and in other cases it might be stronger. Do you think on the basis of a deliberate attempt at fraud - is that a practical proposition. Would it entail the contractor giving instructions to his workmen to put in a correct mix when the Clerk of Works is present on site and put A. I don't think a weak mix when he is absent? that necessarily follows. The mixing of mortar is frequently left to the African labourer and they may mix it badly for him.

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JIDGE: I am actually only concerned now with the question of deliberate weakening on the mixture - of deliberate attempt at fraud by saving cement - from your practical experience you consider that that is feasible? A. It could be done.

ADDGE: It could be done but it would entail giving instructions to workmen to use a different mix when the Clerk of the Works was present to what he was using when he was absent? A. It would be.

JUDGU: The contractor would be placing himself very much in the hands of his workmen? A. It very frequently occurs My Lord.

JUDGE: That instructions are given to mix a weaker mix in the absence of the Clerk of the Works?

A. It is frequently done.

JEDGE: Then the contractor would be placing himself in the hands of his workmen? A. It is a very frequent occurrence My Lord, I have found it on my own work.

JIDGE: You will agree with this note, 'that is a frequent occurrence that a contractor arranges for a weaker mix of mortar to be mixed in the absence of the Clerk of the Works'.

- MR. O'DONOVAN: How many cases have you met?

  40 A. That is an impossible question to say in fifty years how many cases I have noticed.
  - Q. Have you ever had proof of what you have said? It is very difficult to prove.
  - Q. Have you ever had proof? A. No.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

crossexamination
- continued.

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Alfred Edward Wevill.

Crossexamination - continued.

- Q. From your own knowledge it has never occurred to you it has never occurred where you could prove it? A. I have proved that the weak mix is there.
- Q. That is all? A. Yes.
- Q. This is another of your intelligent guesses? A. It is an inference My Lord which I have said in the first place.
- Q. Would you agree that the hidden defects stop there or would you like to increase the list?
  A. Stop where, may I ask? Just exactly what is the line of demarcation?
- Q. Yes. The line between latent and patent defect?  $\Lambda$ . Those things which are hidden and buried and things which are obvious.

JUDGE: We are talking about things in your report? A. Defective mortar in the joints is fifty/fifty My Lord - Bad workmanship should be patent.

MR. O'DONOVAN: Should be patent.

- Q. What do you mean by 'fifty-fifty'? A. Some of it can be hidden when the Cherk of the Works is off the site. It should not be hidden.
- Q. It cannot be hidden if he is keeping his eye on it? A. It cannot be hidden.
- Q. So that is a patent defect as well?
- Q. Which are latent defects? A. Those portions of work which are done in the Clerk of Works' absence.
- Q. Mr. Wevill, you yourself can araw a conclusion to your satisfaction about the quality of the floors, mortar and everything else by examining, let us say a small percentage of the total amount of the material used Correct?

  A. By sampling and testing it. Yes.
- Q. A tiny percentage? A. A percentage.
- Q. Surely the Clerk of Works can draw a far more positive inference as to the characters of the Works from the portion he must have seen being constructed. A. It does not alter the fact that the proportions are not with a ....

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JUDGE: That is not an answer to the question ... The point that Counsel is trying to find out is whether the defects of which you complain in your report would have been obvious - would have been patent - to the Clerk of the Works. A. Had he been there at the time or tested everything, Yes.

MR. O'DONOVAN: Not tested everything, tested part of it? A Yes.

- Q. You draw a conclusion from seeing five floors and three yesterday and you said the quality was better? A. I said the concrete was better.
  - Q. Even the eight is only 1.9% of all the floors you agree? A. Yes.
  - Q. You draw an observation on 1.9% of the work? A. I have examined every floor of the buildings and found cracks in 99% of them I think I can say.
  - Q. You agree that you were unable to show any cracks to the Court on the inspection of the site? A. I showed the Court one crack in one place. I could have shown them others but I could not get into the rooms.

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- Q. 99% of the rooms that were opened had cracks in them? A. I can show in one block half a dozen floors which are cracked.
- Q. Now when we went to the site, you saw concrete being tested by Mr. Stone I am sorry mortar being tested by Mr. Stone and Mr. Mould by putting in, I think it was a screwdriver or knife or something. Do you remember now that mortar was it in your opinion satisfactory or unsatisfactory?

  A. Some of it was in the repointed work those blocks have all been done for the City Council.
- O. But the tested portions which had not been repointed by the City Council? A. Yes I think so.
- Q. Did you hear Mr. Stone say that he thought that mortar was satisfactory did you agree? A. Some was reasonably satisfactory and other poor.
- Q. Mr. Stone stated there was none he would have crdered to be redone. Don't you disagree with his judgment? A. From samples which I have found...

JUDGE: We are talking about tests that were made, when the Court visited the site.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued.

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Crossexamination - continued. MR. O'DOHOVAN: Do you agree that his judgment was right, or disagree? A. I agree with his judgment if the mortar was as some of it was.

JUDGE: He stated there was none of that mortar which he would have ordered to be replaced?
A. He found one bad place My Lord, he said.

MR. O'DONOVAM: Do you challenge that judgment?
A. Not of the mortar he tested .... probably not.

- Q. Did you see the mortar which had been redone by the City Council? A. I have not tested that.
- Q. Did you see it? A. No.
- Q. Did you see Mr. Stone testing that? A. No I didn't.
- Q. You have allowed in your estimate for repointing the superstructure walling a total of Sh.14,937/-- is that right top of page two? A. Yes.
- Q. That is for the whole of the seventeen blocks? A. Yes except the portions which have been done by the City Council.
- Q. Then you allow colour wash, Sh.3,636/-? A. Yes.
- Q. Your largest item is for dressing for the internal faces? A. Yes.
- Q. Coming to nearly Shs.200,000/-- Shs.195,000/-? A. Yes.
- Q. You agree that the standard there must have been obvious to every City Council Official who went out and looked at it? A. The rough face is very obvious, Yes.

MR. O'DONOVAN: I have no further questions My Lord.

Re-examination.

# Re-examination of witness ALFRED EDWARD WEVILL by MR. SCHERMBRUCKER:

Q. May we hear about these figures. You said that you would have put a value of £100,000 - £110,000 on this job if it had been done to specification? A. Had I been asked to give an estimate of the cost that is the figure I would have given.

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. 30 JUDGE: That you mean if you had been asked to tender for the job? A. As asked, I had been asked to estimate what the tender should be.

JUDGE: I see.

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MR. SCHERMBRUCKER: Does that mean that if the job had been completed to specification the City Council would have an asset worth £100,000 to £110,000? A. Yes, My Lord.

Q. Are you in a position to give an opinion as to what in fact was the value of the asset they did get? A. A very difficult question My Lord which I think I said in the first case can only be based on the cost of maintaining these buildings and the cost of maintenance.

JUDGE: That we did have.

IR. SCHERMBRUCKER: I think - Can you give us the ultimate answer to it - whether you formed an opinion after your various investigations what it would probably be?

A. The maintenance cost would be .....

Q. I don't want the maintenance costs. Can you give me your final answer? A. I would say My Lord that the value of these buildings would have depreciated some 55%.

JUDGE: Then going into the workings an answer as to what on the basis of your calculation the value of the asset as completed by the contractor?

A. Some £35,000 to £40,000 approximately.

- MR. SCHERNBRUCKER: Now you were asked in detail as to how much work you did on this site about eight to ten per cent I am sorry I am wrong, how much of the underground, how much of the underground lateral portion you examined about 8 10%.

  A. Yes My Lord.
  - Q. Speaking as an architect, are you satisfied you did sufficient investigation to justify your report? A. Yes. Reporting from experience, I would say that what I have said might happen will happen eventually.
- 40 Q. You would say that the completed job was mater-ially below specification have you any doubts on that? A. No doubts whatsoever My Lord.

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Re-examination - continued.

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Weyill.

Re-examination - continued.

- Q. You say the mortar was variable parts were bad, were there any very good parts? A. I took samples My Lord but none of the samples came up to the specification.
- Q. Did you take samples of both good and bad work. I am not suggesting anything wrong in this but did you confine your samples to where you found weak work or did you take a cross section? A. I took samples haphazard.

JUDGE: You did not concentrate on the weak links only? A. No My Lord.

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MR. SCHERMERUCKER: Now you recommended cutting out parts of the bad concrete. If your recommendations were carried out would that in your opinion bring the whole job to the specification as regards concrete?

A. Are you talking about foundations?

JUDGE: Let us take foundation concrete first.

- MR. SCHEMBRUCKER: Is it correct that cutting out referred to foundation concrete? A. No My Lord. It would not be up to specification it would improve the standard of the work.
- Q. I think you said the whole foundation wall should be re-pointed? Is that correct? A. Yes My Lord.
- Q. Have you any doubts about that as to whether the whole thing should be done? A. No. No doubts at all My Lord. From what I saw it was essential.
- Q. You were asked for certain items concerning your detailed estimates for repairing. The first item was excavating on external face of walls to expose face and back fill with hard core. The figure you gave is Shs. 21,000/-.

JUDGE: I think it would be an advantage to have that document in as an exhibit. That is an estimade of your calculations. That will be Exhibit K. A. Yes.

MR. SCHERNBRUCKER:
Q. The item is number three on page one My Lord,
under foundations. Now, Mr. Wevill, if the whole
of that item was carried out would the job be to
specification? A. The back filling would have
been up to drawing not to specification.

- Q. Perhaps I am wrong, do you mean the drawings are not part of the specification? A. They are taken in conjunction they are part of the contract.
- Q. Then I will refer to contract. It would be part of the contract? A. Yes. My Lord.
- Q. Now is it usual for all building or most building contracts, to have an architect, an engineer and a Clerk of Works, of any considerable size? A. Yes, My Lord.
- Q. Where you have that position, where you have a job where there is an architect and Clerk of Works, do they have separate or the same functions?

  A. The architect provides occasional supervision, the Clerk of Works is full supervision.
  - Q. I think you have got a copy of the contract the contract document would you look at condition one?

JUDGE: General conditions is this? FR. SCHERMBRUCKER: A. Yes the printed document.

20 IR. SCHERHBRUCKER: Where an engineer is defined, 'the term used hereinafter..'

WITNESS: I am afraid I have not a copy.

- DR. SCHERMBRUCKER: Take mine. Would you read (i).
- Q. As an architect do you have experience of proper conditions of contracts and specifications?
  A. Yes. My Lord.
- Q. Now is that definition of engineer normal or abnormal?  $\Lambda$ . It is a normal thing, it applied to the architect or the engineer.
- 30 Q. Do you understand that also as covering a Clerk of Works? A. The Clerk of Works would be 'such person or persons duly authorised to represent the engineer'.
  - Q. Can it be said the engineer and the Clerk of Works under this contract can be identified?
    A. I don't quite understand that question My Lord.
  - Q. Let us put it this way. There are several duties attaching to an engineer under this contract see specification 15 ... 'payments will be made on certificates issued by the City Engineer'. Would

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Evidence for the City Council of Nairobi

No. 15

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Re-examination - continued.

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Re-examination - continued.

it be normal for a Clerk of Works to issue a certificate for payment? A. No, My Lord.

Q. Would you consider that he had not authority to do so under this contract? A. No.

JUDGE: Isn't this a matter for argument more on the wording of contract.

IR. SCHURMBRUCKER: I think it is. I think I can leave it.

O. Now you were asked a lot of questions as to whether the Clerk of Works had performed his functions properly during three hours a day. Generally from what you saw of this work, were you able to draw any conclusions, whether in fact the Clerk had done his work properly? A. I wouldn't like to criticise the Clerk he had a very difficult job and a very big area to cover and I don't think he could possibly cover the whole area that he did in three hours a day.

JUDGE: That is the whole of part B - three hours a day. The evidence is that on part B he spent three hours a day on the average? A. Yes.

Q. The rest of his time he was spending on the other work he was concerned with? A. He should have been able to lock over the major portion of the work. Yes My Lord.

MR. SCHERMBRUCKER: Now dealing with the back filling you say under the floors of these buildings, would you concede any possibility of a different opinion bringing those fillings within specification? A. I cannot possibly see it. It is physically impossible to get that stone in conformity with the specification My Lord.

Q. Bearing in mind all you have seen since your report, the questioning in this Court, have you any aspect in which you would like to alter your report. A. I was asked, my Lord, whether I would revise my opinion after something happened in twelve months or if something happened in two years. I would not revise my opinion. It is based on experience and I think ....

JUDGE: No I don't think that is quite the question. Would you repeat it?

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IR. SCHEREBRUCKER: Taking into account what you have seen since your report and the questions that have been asked you in this Court, is there any part of this report you would like to alter in any way?

A. No, My Lord.

JUDGE: I wish to get a point clear on this back filling of the floors - evidence was given that the back filling, that the type of back filling was specifically drawn to the attention of the architect at the time, with particular reference to the absence of small filling between the stones and that he apparently accepted the size stones that had been put in and did not require small material to be combined with it. Do you think that that was an unauthorised or a gross departure from the specification? A. In my opinion a very unwise one. I would have had it all pulled out and re-done.

JUDGE: This was during the course of construction?
20 A. It would have been a very unwise thing to do,

JUDGE: The evidence is that he did that. A. In my opinion he was wrong.

IR. SCHERMBRUCKER: Taking into account the specification was to be done in six inch mesh - was the work actually done a cross departure from that specification? A. Yes, My Lord.

Q. Now page two of details of your figures - you were asked about the item under 'three' - superstructure walling. It is headed 'first contingencies' - "dress for internal face of walls ... and twice lime wash". In your opinion is that item necessary to bring the job to specification?

JUDGE: Yes thank you Mr. Wevill.

No. 16

# EVIDENCE OF NORMAN FALLON

FORMAN FALLON (Sworn)

Examination-in-chief by MR. MACKIE ROBERTSON of MORMAN FALLON.

Q. Your full name, please, Mr. Fallon?

A. Norman Fallon.

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In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 15

Alfred Edward Wevill.

Re-examination - continued.

No. 16

Norman Fallon.

Examination.

Evidence for the City Council of Nairobi

No. 16

Norman Fallon.
Examination
- continued.

- Q. You are assistant City Treasurer?, with the City Council of Nairobi? A. Yes.
- Q. Exhibit J please? Did you prepare the original of that document? A. Yes.
- Q. Have you got a copy with you you can refer to? A. Yes I have.
- Q. Now in the first place Mr. Mallon, could you explain to the Court what you mean by word 'present' where it appears in the first line and where it appears in the heading in the fourth and sixth columns? A. Yes, the word 'present' is to show how much money would have to be invested to-day assuming an interest rate of three per cent to produce one pound (£1) per annum over a period of thirty years.
- Q. The price in advance so to speak? A. That is so.
- Q. Now if we may come to the line in which you have set out figures opposite  $4\frac{1}{2}\%$  as being total maintenance fund contribution would you explain to the Court what the figures extended from that signify? A. If we take the total maintenance fund contribution at  $4\frac{1}{2}\%$  as shown in the first column, I have put in the second column what that is in addition to a standard  $1\frac{1}{2}\%$ . It involves an extra three per cent, which going on to the third column, assuming a capital value of £110,000 means an addition £3,300 per amnum.

JUDGE: The third column is what? A. The annual additional contribution represented by  $4\frac{1}{2}\%$  in addition to  $1\frac{1}{2}\%$ .

JUDGE: On what? A. £110,000.

WITNESS: By reference to tables the present value in terms of a capital sum to produce £3,300 for forty years is £76,279 as shown in column four My Lord.

- MR. MACKIE ROBERTSON: What sort of tables Mr. Fallon? A. The tables are 'Tables for repayment of Loans 7th Edition, commonly known as 'Archers Tables' Standard form of reference.
- Q. Would the figure be any different in the fifth and sixth editions, save always a printers error? A. No.

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Q. Can we proceed to the next column? A. The next column gives similar information only is based on £85,000 capital value.

Q. Instead of £110,000? A. The difference in terms of an annual payment being £2,550 and the capitalized figure for that being £58,943.

- Q. Now that is worked out on the same tables? A. Yes exactly the same tables.
- Q. Taking the capital value of £110,000, if the maintenance costs on a building scheme of that value were to be 4½% per annum instead of 1½% how much extra cost is the Council being put to?
  A. £76,279.
  - Q. And if you take the other capital value of £85,000 the answer would be? A.£58,943.

JUDGE: That is the extra cost to the Council capitalised as at present, over forty years, but capitalised as at today? A. Yes, My Lord.

MR. MACKIE ROBERTSON: In other words in order to produce an annual sum of £3,300 each year to do the maintenance is £76,279 Sinking Fund you have to establish. A. Yes, that is correct.

JUDGE: Which is? Say that again. A. In order to produce the annual sum of £3,300 as in column three for maintenance work, the Council would be required to establish now a single sum of £76,000.

# Cross-examination of Witness NORMAN FALLON by MR. O'DONOVAN.

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- Q. Just one question don't you think Council could get more than three per cent on their money?

  A. The problem is really related to forty years.

  Council might get more than three per cent today for a limited period of time the question of what...
- Q. Are you in touch with the money markets in this country? A. I think so.
- Q. May I suggest nobody ever secures a loan at three per cent? A. The question as I see it My lord, that to invest money for forty years at a rate of interest is a very difficult thing. One might, at the moment be able to invest for a period

In the Supreme Court of Kenya

Evidence for the City Council of Nairobi

No. 16

Norman Fallon.
Examination
- continued.

Crossexamination.

Evidence for the City Council of Nairobi

No. 16

Norman Fallon.

Crossexamination - continued.

Evidence for Ata-Ul-Haq

No. 17

Thomas Henry Stone (Recalled).

of ten or fifteen years or may be twenty years at a rate higher than three per cent. One is then faced with re-investment at a time when interest rates may be changed completely. The figure of three per cent is related to the Council's own sinking funds. They are based on three per cent with the approval of the Kenya Government.

JUDGE: Thank you Mr. Fallon.

HR. SCHERMBRUCKER: Mr. Stone is being re-called by the defence on one of the documents.

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# EVIDENCE FOR ATA-UL-HAQ

No. 17

# EVIDENCE OF THOMAS HENRY STONE (RECALLED)

# THOMAS HENRY STONE (Sworn)

MR. SCHEMMBRUCKER: Mr. Stone, you gave evidence earlier on in this case? A. I did yes.

- Q. Would you look at this document and tell me if that is your writing? A. Yes, that is my writing.
- Q. And your signature? A. Yes.
- Q. I have had this copy made and I wish to put the document in but I must explain that the copy is imperfect.

JUDGE: I think the original had better go in. Exhibit L.

- MR. SCHERMBRUCKER: I wonder if you could read that report out? A. It is not dated ..... Two months ago, I .....
- Q. What is the heading? A. "Ofafa Estate; Parts A and B; Contracts 60 and 73".
- "Two months ago, I took over the site supervision of the above contracts ....."

(Read report, Exhibit L) .....

Q. You will agree with me that the report generally was concentrated on parts A and B. A. I would like to see report number one.

Q. When you wrote this you wrote yourself, on the top of this paper, 'parts A and B, contracts 60 and 73' is that right? A. I think the reason for that is that I have control of A and B but I was definitely referring to A I can remember now. It was because I happened to be in charge of A and B.

MR. SCHERMERUCKER: What was contract 60? A. I think that is A.

10 Q. One is A and the other B? A. I wish you could find report Number one.

JUDGE: There is not very much in this particular report that is really material.

MR. O'DONOVAN: Except of course that my right of cross examination is not limited.

- Q. Have the City Council all your reports? A. I submitted them I take it that is so.
- Q. Did you make other reports specifically about part B? A. Very difficult to say how many reports I wrote or what particular report I wrote, but I think those could be obtained for information. I did send, I sent it to the architect, it would be in his files.
  - Q. Did you send weekly reports? A. Yes.
  - Q. On the Plaintiff's work? A. I sent it on the whole of the work including the Plaintiff's work.
  - (). You sent reports every week? A. Yes certainly.
- Q. One thing I find puzzling Mr. Stone, perhaps you can explain. This report starts "Two months ago I took over site supervision of the contract ....? A. Yes.
  - Q. Now Mr. Mould has put in a report in which he has copied the whole of that first paragraph and quite a lot of other material? A. I don't know how he did that, he had the report.
  - Q. You didn't write the report for him? A. Not at all. I wrote this and sent it in.

JUDGM: Can you just follow that point up - it appears from further down you say in this report,
40 'Yes Mr. Mould took over on 14,3.55? A. So I did, yes.

In the Supreme Court of Kenya

Evidence for Ata-Ul-Haq

No. 17

Thomas Henry Stone (Recalled)

- continued.

Evidence for Ata-Ul-Haq

No. 17

Thomas Henry Stone (Recalled)

- continued.

JUDGE: So this report must have been written after Mr. Mould took over, in fact?

JUDGE: I may be wrong, I got the impression from previous evidence that you had been on the site for more than two months before Mr. Mould took over?

- MR. O'DONOVAN: You were there for nearly a year? A. Yes.
- Q. You see Mr. Mould put in a report, in fact I cross-examined about it. I asked him one question and he replied, 'Oh that refers to Block A'. You 10 have no explanation as to how his report uses the same wording as yours? A. None unless he copied mine.
- Q. This does not refer to you at all correctly, you did not take over the site two months ago? A. No, I took over the site from the commencement, the early period. I can't understand that. have never seen Mr. Mould's report.

But what we want now is an explanation. It is obviously not a correct statement on the face of the first two lines of your report. viously not a correct statement if it refers to A. No it doesn't. If I wrote that it is you? incorrect.

JODGE: You can't explain it now? A. I made a mistake there.

- MR. O'DONOVAN: You have written something very correctly which applies to Mr. Mould? A. I would have to dig deep into this. This 'two months ago'. I can't connect it. But I can assure the Court it refers to Part A.
- Q. Two points I wish to ask you about which will come up rather later. Testing the foundation walls it appears there is not any hard core back A. On the outside? filling?
- Q. On the outside? A. The specification as far as I can remember did not call for backing filling of hard core outside the walls, between the black cotton soil of the walling.
- Q. It did not? A. Not to my knowledge. I should like to refer to that if I may.
- MR. O'DONOVAN: There is a plan. This plan number 3183/AH/2/14 - half scale section - Do you see that? A. Yes.

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WITNESS: There is one small stone boulder shown there.

MR. O'DONOVAN: Do you see hard core filling under the step, was that put in? A. Yes I don't take it as going to the top of the concrete foundation anywhere.

- Q. Would you look at the hard core filling? A. Yes it is shown vertical.
- Q. Do you see some dots? A. It looks as though there is some small ......
  - Q. Do you read that as meaning there should be some small degree in there? Did Mr. Tanner take it as that? The trials were done for him? A. Yes.
  - Q. Down to the foundation? Surely all those would show there was no hard core filling outside the walls?
  - Q. It must have been obvious to Mr. Mould as well? A. Yes he was there.
  - Q. Did either of them question the absence of the hard core filling? A. No not to my knowledge.
    - Q. Did you conceive that you had power on behalf of the engineer? Did you have power on behalf of the engineer to order any defective work to be corrected? A. I did.
    - Q. Did you represent him on the site? A. I take it I did.
    - Q. You were ... The engineer appointed you in writing did he not? A. He appointed me as Clerk of Works.
- 30 Q. In writing? A. Yes.
  - Q. Were you aware what the class of mortar used in foundation walls was? A. Yes I observed the mix.
  - Q. Was any of it covered up while you were not there so that you could not see when you came back? A. Not to my knowledge. I was very careful in supervising this work and I did not find any mortar left.
  - Q. You ascertained the quality of all of it and approved it? A. Well I didn't examine every ....

In the Supreme Court of Kenya

Evidence for Ata-Ul-Haq

No. 17

Thomas Henry Stone (Recalled).

- continued.

Evidence for Ata-Ul.-Haq

No. 17

Thomas Henry Stone (Recalled).

- continued.

Re-examination.

Q. Sufficient of it to approve of it? Every bit of it I could not, but I examined daily a bit of it and approved it.

- Q. And the mortar in the superstructure walls. The suggestion is that you might have been misled by defective work being covered up by pointing?
  A. I don't think I was misled and in any case I used to scrape some of the mortar off. It had been done to my satisfaction.
- Q. Did you see any case where pointing had been put on to seal inferior jointing? A. No I didn't.

JUDGE: Is not this going over ground we have already had?

MR. O'DOMOVAN: I have no further questions.

- Re-examination by MR. SCHEREBRUCKER:
- Q. Can you look at that report? The Second paragraph, you say 'work which was in an advanced stage I ordered to be completed, paying special attention to the finishes. Other work especially part A I ordered to be held up'. Other than part A, where would it be? A. I considered that was all part A. It was work which was done when Mr. Mould came along. I cannot remember the number of the block but it was a block perhaps I can see a plan.
- Q. When you say 'especially on part A' do you imply there was somewhere other than part A? A. The whole of that was Part A because Mr. Mould wanted this particularly. I should say Part B was very much better than part A.
- Q. Were the specifications the same? A. Almost. I should say they were.
- O. Can you imagine any reason you would have for appending the two together in a report like this?
  A. Well I am perfectly sure I have not appended the two together, unfortunately I headed it A and B.
- Q. When you say 'two nonths'? A. Yes, it is two months, I made an error.
- Q. Look at that plan B where you saw the hard core under the step. A. Yes.
- Q. Is there hard core shown both inside and outside the wall? A. At the step it is shown on the inside.

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- Q. Is any shown inside and outside? A. There is a small piece just shown below. One Little boulder.
- Q. Would you look about the middle of the plan? A. Yes that is new floor, that is hard core.
- Q. Then there is a wall, then is there some showing outside the wall? A. Only one little block. I think that is an error by the tracer.
- Q. Is it hard core? A. I would not class it as hard core.
  - Q. I am looking on the right in ... Would you look at the ring inside? A. Yes that is hard core.
  - Q. On the middle of that page there is something shown inside the wall and something outside. Would you say they are both hard core? A. I maintain these are both inside the outside walls.
  - Q. Now you were appointed by the engineer as Clerk of the Works for that contract. Is there a recognised difference or not between the duties of a Clerk of Works and the duties of an engineer.

    A. It would be a difference of duties because one is a supervising executive officer and I was appointed under him acting as representative and I consider I was his representative.
  - Q. Were there any things which the engineer could do that you could not do? A. I should say so yes.

JUDGE: You had authority to do certain things?
A. Yes. For instance I could not expel a man from the site, which the engineer could.

# EVIDENCE FOR CITY COUNCIL OF NAIROBI No. 18

# EVIDENCE OF HUGH THORPE

HUGH THORPE (Sworn)

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Examination-in-Chief by MR. MACKIE ROBERTSON.

- Q. Your full names Mr. Thorpe please? A. Hugh Thorpe.
- O. And what is your present employment?
  A. Storekeeper in the City Council of Nairobi.

In the Supreme Court of Kenya

Evidence for Ata-Ul-Haq

No. 17

Thomas Henry Stone (Recalled).

Re-examination - continued.

Evidence for the City Council of Nairobi

No. 18

Hugh Thorpe. Examination.

Evidence for the City Council of Nairobi

No. 18

Hugh Thorpe. Examination - continued.

- Q. How long have you been in that appointment?
  A. Eleven years.
  - Q. Amongst the stores under your control did you keep any damp proof felting? A. Yes we do. It is known to me as roofing felting.
  - Q. And have you got with you your record card in respect of that commodity. A. Yes sir.
  - Q. By referring to that card, tell the Court whether you had any stock in roofing felting during the year 1954.

    A. Yes I did, throughout the whole of 1954.
  - Q. And 1955? A. And through 1955 as well.
  - Q. Did you make any local purchases of this material in the town in 1954? A. Yes we did, yes.
  - Q. And 1955? A. In 1955 also.
  - Q. To your knowledge has this material ever been out of stock or out of supply during those periods? A. Not so far as I was concerned. When I asked for a supply of roofing felt it was always supplied when I asked for it.
  - O. And can you tell My Lord what ply roofing felt? A. Three ply normally. It is the only kind we stock.
  - Q. And is the material also used for making damp courses in buildings? A. Well so far as I know. I issued it. What it is always used for I don't know.
  - Q. Is it sometimes used for making damp courses? A. Oh, yes.

MR. O'DONOVAN: No Questions Hy Lord.

MR. SCHERMBRUCKER: May it please Your Lordship that closes the case. I was expecting to have another witness but he is not readily available.

JUDGE: Would you prefer to adjourn to tomorrow morning before preferring an address. I don't think it is unreasonable in view of the length of the case. How long are you likely to address?

MR. SCHERMBRUCKER: A. I have just been arguing that out with my Learned Friend. I think I shall be longer than I think. My case should finish in the morning.

JUDGE: You think both addresses should be delivered tomorrow? A. I do yes.

J'DGE: 10.30 a.m. or earlier than that? A. As your Lordship pleases. 10.30 a.m. will suit us alright.

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#### No.19

# ADDRESS FOR NAIROBI CITY COUNCIL

### 10.7.57.

Hearing resumed. Bar as before.

# Schermbrucker for Defendant.

Contract documents. Here Engineer and Clerk of Works. Concede Engineer's duties largely deputed to Architect. Clerk of Works occupies well recognised place in contract which does not coincide with that of Engineer. Engineer did keep to himself the issue of certificates. Verbal alterations to specifications.

- (a) Under contract alterations should have been in writing.
- (b) No alterations alleged in pleadings. In absence of Tanner must rely on legal aspect and claim bound by contract and pleadings. Engineer employee of building owner, but in many respects acts independently as engineer. (Written substance of argument handed in In circumstances shorthand note of addresses unnecessary).

Dakin and Lee (1916) 1 K.B. 566 and 579/8 (at p.578) - "It is immaterial that the Plaintiffs considered..."etc. Foot of P.579/80.

(Note: Court: Are agreed results of tests of recent samples to be handed in as agreed.

Schermbrucker: Results of tests not yet available: Agreed that results should be handed in when available and should be taken into consideration in statement. Joint letter will be sent forwarding results).

Submit Clause 16 of General Conditions is the vital provision - submit filling up of interstices of hard core filling is "good building practice" and should have been done.

In the Supreme Court of Kenya

No.19

Address for Nairobi City Council 10th July 1957

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No.19

Address for Nairobi City Council 10th July 1957 continued Specification 17 - "final Certificate" - suggest the certificate for 95%. P.7 of Note: Submit Plaintiff's case that work good does not harmonise with his case that work accepted and certified Exhibit L - Concede Stone said refers almost entirely to Part A. But purports to refer also to Part B. Submit parts of report general to Parts A and B and work in B bad too. Submit City Engineer is not merely City Council employee but Engineer to Contract.

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(Close of Address - Notes of Counsel on his address from part of notes on case).

# NOTE OF CLOSING ADDRESS FOR DEFENCE AS HANDED IN BY COUNSEL AND MADE PART OF RECORD.

Plaintiff claims Shs. 140,018/- balance of Price due on a contract to do work and supply materials.

ISSUES 3 & 4. If issue 3 is answered 'Yes' then Plaintiff gets Shs. 140,018/-.

No argument on detail.

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If answer is 'No' this item must be dismissed.

ISSUE 4. Hardly arises.

ISSUE 5. Only arises on Counter claim.

ISSUE 6. 'Waiver' must be with knowledge.

It must be by the Council NOT by Engineer.

No proof of any Waiver.

ISSUE 7. Estoppel - Could only arise if Defendant is bound by certificates of Engineer.

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Not so in this case.

N.B. Condition 16. Law referred to in opening.

ISSUE 8. Arises with Issue 5 on Counter Claim.

In the Supreme Court of Kenya

ISSUES 9 & 10 'Extras'.

No.19

Main Issue is No. 3.

Address for Nairobi City Council 10th July 1957 continued

I approach this as in Opening address.

- 1. If Plaintiff has completed works he is entitled to full contract price (i.e. balance of Shs.140,018/-) against which damages for defective work can be set off (McConnel puts this at 5% on contract price).
- 2. If Plaintiff has not completed the works he is only entitled to 90% of the value of the work properly done.

But in assessing damages allowance must be made for the fact that if he had done the work properly he would have been entitled to full balance.

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(N.B. I think this means that the proper measure of damages is NOT cost of repairs but Value of completed job as ) Whichever is it should have been ) the more ecoless value of job as it was nomical for ? less balance due on contract ) Contractor.

This might in fact be less than full costs of bringing job to proper standard).

But see Dakin v. Lee (1916) 1 K.B. 566 appeal at 579 & 578.

Alternatively Acceptance was obtained by Fraud.

This is new issue since we framed issues.

Only rely on 3 in the alternative Rely first on submissions

- 1. Plaintiff never completed the job
- the job
  2. What he did do was not done properly.

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No.19

Address for Nairobi City Council 10th July 1957 continued

# What did he undertake to do?

See Form of Tender -

To build 17 blocks comprising 228 dwelling units and 24 ablution units in terms of a formal agreement to be drawn up and to the time schedule quoted.

Delay in Completion not raised.

Contract was executed in terms of tender documents.

Exhibit 1. Clause 1. £85,476. See Form of Tender for details.

See Annexure to Plaint for further details

Balance of Shs. 140,018/-.

We'll deal separately with further Claim for refund of Shs. 50,000/- deposited for security.

We'll also deal separately with 3rd Claim for :-

An Order for enquiries to assess amount due for extras.

Read Contract 1 - 4.

Refer General Conditions.

(i) & (ii) (i) & (ii) 237 (iv)(i) first line

## Specification.

Page 1 No.1

reducing Claim to :-

No.2. (It is sound building practice to fill interstices in hardcore fill)

Page 2 No.8 No.15 No.14

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10		0.25.	cf. Condition 1 (ii) cf. Plan 3183/AH/2/14 'Dwell- ing Units' which clearly shows a filling in inter- steces - N.B. Plan 3185/AH/2/15 'Ablu- tion Units' does not - But see General Specification 1 on Page 1. "sound building construction practice". N.B. It might have justified a claim for an extra but it should have been done. Wevill would not allow an extra: - No semblance of ramming in 6" layers. Manifestly impossi- ble with such boulders.
20	Page 5 N	5. 6. 7. 8.	
	Page 6 No	0.15.	
. 30	Page 7 No	20 21 23 25 26	'parging'. last 2 lines
	Page 8 No	-	? 'flats'
	Page 9 No	0.42	
	Page 10 N	No.52	Ablution doors
	- Taken ind	ייה ליז לי	ally some items may seem fussy
40	or fastidious fects is seri	a but	the cumulative effect of de-
	Hardcore	filli	ng below floors most serious.

No.19

Address for Nairobi City Council 10th July 1957 continued

Hardcore filling below floors most serious.

This cannot be patched up without taking it up completely

Foundation footings are the next most serious - same applies or underpinning ?

No.19

Address for Nairobi City Council 10th July 1957 continued Cannot possibly be said in general that the work was done or that it was properly done.

Mould may not have been the best of witnesses. But neither was Newlyn who positively dodged the question whether hardcore had been rammed in layers. 'I did not say it had been', was as far as he would go.

In general Wevill supports Mould - thoroughly bad job - Even some support for this from Newlyn as regards hardcore fill which was the only item he saw underground.

Although he spent many hours on the job beforehand and had Wevill's report, he never looked below floor level??

Perhaps he thought it wiser not to.

Even McConnel does not say the job is complete. He says the last 5% maintenance deduction should be adequate to cover defects.

That = £4274

But he never commented directly on the hard-core disclosed in the floor that was dug open and inspected.

Plaintiff says:-

- 1. I did the work to contract.
- 2. If not you are bound by the certificates of your Engineer, and
- 3. If that is not enough you are bound by his letters of acceptance and by occupation of the buildings.

I have dealt with 1 under the contract - which provides specifically in passages quoted that the Contractor will do the work properly and even if anything is not definitely referred to, but fairly and obviously intended, and which is usual in sound building construction practice, it

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will be considered as having been included in the contract; (spec. 2 on P.1) - See 'Dwell-ing house' plan. If there was any doubt that filling of intersteces was not intended it could have been claimed as extra.

No excuse for the hardcore filling that we saw on inspection of the site.

Even if the contract did not go so far there is the common law liability that it will be properly done and with the skill of a reasonable building contractor.

Now if Plaintiff is correct that the whole work was completed and done properly :-

1. When was it completed ?

Contract provides for Completion block by block.

Last certificate is issued on take over and payment of 95%.

Balance is due on expiration of 6 months from that date for each block.

An offer was made to substitute a maintenance period for all buildings to run from take over of the last of them but no evidence that this was ever accepted.

Even if it had been where was power of Engineer as such to alter this term of the contract?

It was not done.

So even if Plaintiff is right balances due on Exhibits 3 & 4 are barred (Section 129 Municipalities Ordinance) (Issue 2).

If the maintenance period was legitimately extended then it has not yet started to run and whole action is premature (Issue 1).

If there should have been a final Certificate, there has not been one, and this also covers Claim No.2 for Shs. 50,000 refund (See Spec. 17 p.3).

In the Supreme Court of Kenya

No.19

Address for Nairobi City Council 10th July 1957 continued

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No.19

Address for Nairobi City Council 10th July 1957 continued

Evidence shows substantially that

- 1. excavations for foundations
- 2. foundation footings
- 3. foundation walling
- 4. hardcore filling under floors
- 5. superstructure walling6. roofs
- 7. joinery
- drains

Are all in a very large degree defective and below the standard called for.

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McConnel was not impressive and cannot be taken to contradict this. Neither can Newlyn. He saw nothing below ground until inspection of haracore with the court.

This has come about through

- ? lack of supervision
- ? lack of consciencious
- ? even complete negligence or dishonesty of those supervising - we don't know. But does it matter.

There is still a duty on the contractor

- (1) under contract
- (2) in law.

It must be clear if I am right that work was materially substandard that

- (1) he failed in his duty and
- (2) he deliberately scamped the work i.e. he or his employees. If he did this whilst maintaining a show of compliance with specification it is fraud.

Will not consider evidence in detail but many test results are shocking - they are on a par with the hardcore filling which is shocking and drains are patently shocking and do not even pretend to carry the water into estate drains.

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The remaining major defects emphasised are proved in the evidence.

Defendants hesitated to allege fraud until after Plaintiff had sworn on oath without reservations except 1 ply damp course that all the work was good. If anything it was above specification e.g. Cedar facia boards.

That position has been thoroughly exploded.

Stone was a good witness - down to earth practical man - but well on in years - and with more to do than he could reasonably manage. But was he truthful? cf. Report put in on being recalled for Defence. Ex.L.

He made it clear that if the work was bad - and it was - then he had been defrauded. He would never have passed work to show a lot of the tests. It is a little difficult to understand his passing the hardcore which he must have seen; but even if he passed it, that does not absolve Contractor.

- 1. Inspection holes showed good mortar with poor mortar in enlarged sections.
- 2. Good screed over defective concrete.
- 3. Painting over of roof joints.
- N.B. Particularly good floor screed.

Also marked contrast between screed and concrete (Adamson) also in work above and below ground (Mould) (Wevill).

All these point to concealment and fraud.

But even apart from fraud:-

l. Defendant has shown work was not to specification - far below it in vital places.

Substantial reduction in value of what Defendants should have got.

Plaintiff says - Yes but your Engineer or

In the Supreme Court of Kenya

No.19

Address for Nairobi City Council 10th July 1957 continued

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No.19

Address for Nairobi City Council 10th July 1957 continued his representative approved and took over a large part of the works if not all.

This argument entirely misconceived and must fail Hudson 3rd Ed. Vol. II p.23 and cases quoted and

Goodyear v. Weymouth Corpn (1865) 33 L.J. C.P. 12.

(In August 1954 Plaintiffs contracted to build a market house for Defendants for £3424 - to the entire satisfaction of the Architect - and there would be no deviations from specification either by extras or omissions without written authority of the Architect - the works were completed and delivered up in December 1955 - On 31/7/56 Architect certified £6283.10.2. - Defendants had paid £3651.2.7. - Plaintiffs sued for balance including extras etc. - There was a provision that in case of dispute as to intent or meaning of contract the Architects' decision was to be final.

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See P.16 2nd Column, Erle C.J. held Architects' certificate was in the nature of an award binding both parties as his decision was final).

All these support the contention that where work has been approved by Architect, it is too late to complain of defects afterwards. There are many other similar cases.

In all of them, however, the contract provided that the certificate or decision of the Architect was to be conclusive as to the quality of the work.

In that class of cases the Architect's Certificate shuts out all subsequent complaints by the Owner, except in cases of fraud and the like. Deception would appear to be present here anyhow on the part of the builder or his employees but that is as far as I can take it.

What went on before Mould came is difficult to say. Whatever his faults may be, he certainly caused a change in things. He did not find out everything at once but when he did, he acted

to the best of his ability. If he had difference of opinion with his superiors, it does not matter. Even if he passed the work, and accepted it himself, it would not matter in this case because

The Engineer's decision was NOT final.

N.B. General Condition 16.

The law is correctly stated at pages 238-9 of Hudsons 7th Edition.

If no provision in a contract for final or conclusive certificate by Engineer there is nothing on earth to prevent the owner from complaining of defects. cf. Keating, P.68 Section 5.1. But here we have condition 16 which puts the matter beyond dispute. Newton Abbott Development Co.Ltd. v. Stockman Bros. (1931) 47 T.L.R. 616 at P.617 line 10 to line 21.

True measure of damages is here stated to be the value of the works as they should have been less their value as they were. But cf. Dakin v. Lee.

It follows from Condition 16 that although the blocks were taken over, the Defendants are not precluded from complaining of defects.

Hudson 7th Ed. P.234-6 N.B. P.236 Section (b).

Claim can be by way of set-off or counter-claim or both.

Thus even if the Defendants' Engineer accepted the work by signing taking over certificates and paying 95% and even if the premises have been occupied, there is nothing to prevent the Counterclaim for breach of contract.

I have dealt with Adcock's Trustees v. Bridge R.1 (1911) 75 J.P.241, quoted by Plaintiff's Counsel and would ask that the whole of the judgment of Phillimore J. be read especially—"If in fact that work is badly done and mischief follows in consequence the Architect is

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Address for Nairobi City Council 10th July 1957 continued

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No.19

Address for Nairobi City Council 10th July 1957 continued not without his power and the employer is not without his protection, the Architect then uses clause 17 (Our 9 (ii) & (iii) and applies the retention money..."

Adcock's Trustees does not help Plaintiff.

Further there is nothing in our contract which makes clauses 9 and 10 exclusive remedies for Defective work.

Even if maintenance period expired; in the absence of a certificate which is conclusive as to the sufficiency of the work, there would be nothing to prevent a claim being made for damages for breach of Contract. Robins v. Goddard (1905) K.B. 294 per Stirling L.J. at 303 - N.B. General Condition 1 (ii).

There is no evidence that anyone on the Engineer's behalf ever approved in writing the bottoms of the trenches for foundations.

Spec. 25 required these to be "approved" before concrete was laid.

In the absence of such written approval, it is still open to the Engineer to use his power under Condition 10 and require the work to be opened up, but this is a very technical point and I do not think we will have to rely on it.

2. Claim for refund of Shs.50,000. I have already covered this.

In any case the Contractor never finished the work. The Defendants did so.

Although the Engineer threatened to act under General Condition 23, he did not really do so. He patched and completed the work to the standard the Contractor had adopted but he did not do all that he considered necessary and indeed it would not be justified in the circumstances.

Perhaps the correct measure of damages should be :-

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Value of Completed job as it should have been

In the Supreme Court of Kenya

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less value of it as it was
If so give credit for full
contract price in calculation
Less balance due on contract

140,018/-

Address for Nairobi City Council 10th July 1957 continued

3. Claim for Extras. But cf. Dakin v.Lee

Here I must insist on Contract clause 2.

(a) Notice in writing to Contractor

- (b) Value to be determined by Engineer.
- (c) He then adds to or deducts from Contract price.

If Contractor not satisfied with what he has done or refused to do he must proceed under Clause 26 of General Conditions

I must also emphasise

General Conditions :-

l (ii) 17 (i) 18 (i) lst 3 lines. 19 26 (i)

Any order to assess claims for extras must be :-

(1) to the Engineer(2) to be done subject to above provisions.

### COUNTERCLAIM

Already dealt with.

If basis of claim is wrong then I would ask the Court under "alternative relief" to apply the basis of the Newton Abbott case. Contractor knew what chamfered edges meant. Said Said

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he didn't do it.

No.19

Address for Nairobi City Council 10th July 1957

continued

l ply = v/o i.f.o. Council

Contractor says he did clench nails, admitted important to clench them.

Crowbars - Overstating case - no bolts in hinges v/o i.f.o. Council.

If Court feels disposed to assess extras in view of agreed issues 8 & 9 and is able to do so on the evidence then I claim deletion of

- 13. 2736/- shelves
- 15. 5660/- rendering concrete slabs.

  This is in the Spec.
- 16. 2721/60 Podo batten

See Dakin v. Lee. The work must be done substantially to Specification. It is not enough if there are material variations but nevertheless the buildings will stand. Last minute evidence is very revealing.

Ex.72 Goodwin says too late to get this contract to Specification or even near to it. (This put in by Plaintiff)

Impossible to get work to Mould's standard without redoing it wholesale.

Mould only demanded compliance with Specification.

The last Exhibit - Stone's Report completely confirms this and rather conflicts with the general tenor of his evidence for Plaintiff. Perhaps this explains the very bad hardcore filling.

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#### No.20

## ADDRESS FOR ATA UL HAQ

O'Donovan for Plaintiff:

Defence of fraud - stated only alternative defence - verbal representations alleged - serious allegations - criminal offence.

Plaintiff stated he made no verbal or other representations. Not cross-examined. Stone denied relying on any statement of Plaintiff.

Not cross-examined. Mould not asked. Goodwin not called. On evidence - general comments.

Burden of proof that there is defective work is on Council. Spectacular difference of opinion between experts. Submit finding should be in favour of Plaintiff.

- (a) Formal acceptance of 11 out of 17 blocks after close supervision. Acceptance of remaining 6 subject to remedying of defects.
- (b) Specification called for class of work of economical type.
- (c) Failure of Mould and Wevill to justify criticisms on visit to site. No place where damp course missing or use of hoop iron of wrong gauge missing or lack of hoop-iron except in one place in office block. Failure to point out cracks explained that it was wrong time of year. Wevill abandoned theory that there was black cotton soil in foundations in favour of theory of pressure from outside. Failure to point out any trace of subsidence foundations in water for 2 rainy seasons.
- (d) Mould's memo. to City Council not case of detached expert but partisan with tendency to exaggeration.
- (e) Fact of occupation by City Council for considerable time without repairs.

Inference that what work was done was "redone" was to impress Commission of Enquiry.

In the Supreme Court of Kenya

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Address for Ata Ul Haq 10th July 1957.

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Address for Ata Ul Haq 10th July 1957 continued

- (f) Inference against Council from failure to call any of Officers Goodwin, Bridger, Saunders or Tanner. Some available here. Appears that Mould disagreed with all of them. Goodwin Plaintiff content to rely on his written admissions "impossibility of pleasing Architect".
- (g) Comparison of re-pointing done by City Council with work done by contractor some indication of standard.
- (h) Mould "A different standard in accepting work from that in condemning it". Absence of written corroboration of protests stated to have been made by him. Statement to water Engineer that blocks ready for occupation. Mould aid not heartily condemn works till it became politic to do so.
- (i) In respect of 11 blocks 95% of price paid and in respect of remaining 6 90% paid Buildings completed. Certificate not final, but striking evidence.

Clause 15 of Specification - "work satisfactorily completed", "work properly completed"

#### Samples.

Samples taken by Mould not representative of overall character of works - said only interested in defects. No retention of analysis of Goodwin's samples which satisfactory. Other samples taken of which results missing - inference against Council. Mould before commission pointed out bad mortar which proved to be up to specification. McConnel's samples from floor satisfactory. Mould entitled to look for defects. Stone's samples satisfactory. Wevill's samples - taken haphazardly - submit indications - inference that his samples not representative. Report says mortar varies in quality - but all samples bad. Mortar in foundations - Wevill examined 600' of foundations - found 31 small weak patches requiring cutting out.

Sand - must have been very carefully removed - Newlyn - Wevill - weakest links - said report justified on that ground shows he looked for worst places. Weak patches in any building. Analysis

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of most recently taken samples will be significant - first time samples taken which Plaintiff admits fair. If satisfactory further indication that other samples not representative. Mould's evidence of attempt to deceive him. No written support for his allegation. Difficult to do and would have to be done surreptiously. Not put to Plaintiff in cross-examination. If Mould held up payments on certificates 11 and 12 as "precautionary measure" only, inconceivable he would not have done something about holding up certificate 13 when he discovered this.

In the Supreme Court of Kenya

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Address for Ata Ul Haq 10th July 1957 continued

Mould's forwarding of Goodwin's report. Dates in Goodwin's report - Holes filled in and reopened. Inspection by Wevill a day or two before issue of Certificate 13. Yet Mould makes out Certificate for signature of Saunders notwithstanding attempt to deceive. Mould states inferred repointing in holes because of relative hardness of mortar in and beyond holes. But re-pointing fresh and would be impossible to conceal. Probable he took no action because not certain of inference. Only affects case indirectly as affecting credibility of Plaintiff. No mention of this event in Goodwin's report.

Defence that action premature. Based on argument that payment not due till Engineer's certificate issued. In 11 out of 17 blocks all formal certificates and written acceptances have been issued. Remaining 6, on any view of facts, Plaintiff entitled to payment. If action under S.23 taken wrongly, breach. If rightly, Plaintiff entitled to balance after works completed to specification.

Claim out of time - I accept evidence of defence that it was arranged that all maintenance work should be completed at one time - Good-win's statement and Mould's evidence. Don't agree this extends period, merely postpones period for remedying of defects appearing during maintenance period. Some maintenance done. Submit follows right to payment of 5% on first 2 blocks completed would not arise till maintenance in fact done. If action of taking over of whole work in November 1955 and expelling contractor were lewful, then cause of

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No.20

Address for Ata Ul Haq 10th July 1957 continued action arose by virtue of Clause 23 (4) within reasonable time thereafter. Work to be completed in reasonable time thereafter. If not lawful - breach - action filed in 6 months period.

Law.

Admit departures from specification. In every case matter within knowledge of Council's Officers and met with approval - or was in accordance with specific verbal instructions. Fact pleaded in Reply - para.3 (d) - to amended Defence - in c/s 170. On general principles Council cannot through officers instruct contractor to carry out work in certain manner - e.g. non-filling of interstices on ground of expense - and then after work taken over order contractor to re-do work. Law and equity would not allow it.

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Clause 2 (1) - Contractor to execute works in accordance with instructions etc. of Engineer. Agree "directions" stated to be directions in writing. No provision that instructions or explanations to be in writing - Submit may properly be made orally. Surprising if every instruction or explanation to be in writing.

Duties of contractor - clause 2 (1) and 7 (4) of General Conditions. Submit clear Clerk of Works represented Engineer for certain purposes - in particular requiring work to be re-done or approving it - submit "Engineer" for some purposes includes the Clerk of Works. Unimportant that they were called Clerk of Works. Functions they performed is important. Functions were within ostensible authority. "Engineer" also includes building inspectors, etc.

2.15 p.m. Hearing resumed. Bar as before.

O'Donovan - Address - contd.

Effect of acceptance of work. Contract provides work to be done to satisfaction of Engineer. First 11 blocks - Engineer wrote letters to Contractor. Must operate as certificates of completion and cause maintenance period to commence. Apart from final acceptance - Architect or Clerk

of Works accepted every stage of all 17 blocks subject only to remedying of certain defects which was carried out. Effect of Clause 1 submit acceptance by Clerk of Works equivalent to City Engineer himself. Effect of acceptance of one stage of construction as work went on. In principle no reason why such acceptance should not bind employer to same extent as final certificate. Acceptance during course of work no provision requiring such acceptance to be in writing. Expression of satisfaction with part of work means contract fulfilled as regards that part. In any event City Council has no case as regards patent defects.

In the Supreme Court of Kenya

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Address for Ata Ul Hag 10th July 1957 continued

Halsbury (Simmons Ed.) Vol.3 at P.454 - para. 867. Judgment of Court of Appeal - Bombay Furniture Works v. Gross. Civ. Appeal 95/55 (unreported)

Patent defects waived. Rules out most of Wevill's complaints - no hidden defects. Deviations known. Even Mould aware of defects Mould protested against City Engineer issuing certificates by City Engineer. Submit that disposes of Defence case almost entirely. Class of cases of which Bateman an example or class of which Newton Abbott an example. Three grounds on which contract should be in former category. Agree no provision that certificate final. No such provision in Bateman's case.

(a) Issue of Certificate is a condition precedent to payment. Adopt argument as stated in Keating at P.68. Prima facie where conditions precedent, certificate is final and conclusive. Clause 15 of specifications - "satisfactorily completed".

> Clause 19 of specifications - responsibility of contractor to cease. Clause 7 (4) of General Conditions - Date of completion to be certified. Therefore until City Engineer has expressed final approval, contractor cannot recover balance due.

Arbitration Clause - excludes matters left to decision or determination of Engineer.

Clause 16 of General Conditions - Specification

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Address for Ata Ul Haq 10th July 1957 continued excludes payment certificates but no other from being conclusive. Only "payment certificates" are those relating to 95%. No certificate necessary for final payment. Certificate referred to is payment Certificate. In terms does not relate to final certificate of acceptance of work as satisfactory.

Hudson - P.239 - Distinguish this case from class there set out Newton Abbott case. Bateman's case - only report in 4th Edition of Hudson at P.36. Refer to judgment of Coleridge L.J. at pp.33/34. Also judgment of Grove J. P.49; also judgment of Archbold, P.50. Submit no dissimilarity between Bateman's case and this. Bateman's case still leading authority. Not over-ruled by Newton Abbott case. Judgment on construction of contract document taken as whole. Say certificate-of acceptance here becomes final at expiry of 6 months from date Engineer expresses satisfaction that work perfectly completed.

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Newton Abbott case - does not appear whether certificate a condition precedent to payment.

Appears certificate was for ancillary purpose.

Therefore distinguishable from this case Retention Clause - does not appear how it was worded.

Maintenance Clause - here substantially similar to that in Bateman's case. Newton Abbott case referred in Halsbury Vol.3 at P.456. Here contract also provided for specific approval of parts of work and material.

Para.25 of Specifications - all bottoms to be approved before concrete laid.

Para.15 of Specifications - samples of stone and dressing.

Para.46 and 52 - Tiles and roofing furniture.

Object - approval to be given to trenches before covered once and for all - also as to stone, tiles etc. before used. Object that approval should be final even before maintenance started. Inconsistent with clause 9 (2) of General Conditions. Latter apply to all City Council building contracts - specifications apply to this contract and submit prevail. Submit if bottoms approved, no complaint can thereafter be made. Approval should be in writing. But City Council and

officers gave verbal approval and required Plaintiff to act on approval. City Council cannot now rely on officers not expressing approval in right way.

Ad At

Adcock case - rely on general principles for which that is authority - Failure of Engineer to get defective materials, etc. removed or redone during progress means cannot be done when work complete.

Address for Ata Ul Haq 10th July 1957 continued

In the Supreme

Court of Kenya

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Hudson, P.239 - Halsbury Vol.3, P.456. Agree failure to exercise power under Clause 9 (a2) results in loss of powers, but does not involve loss of other powers in contract, e.g. Maintenance Clause. But Maintenance Clause can only apply to defects appearing in period - not to variations of which City Engineer fully aware and in cases result of his specific orders.

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Refer Hughes v Metropolitan Railway Company (1877) 2 A.C. 448. Birmingham and District Land Co. v London and North Western Railway (1889), 40 Ch. D. 286. Argue: City Council entitled to demand work in accordance with Contract. accept work not in accordance with contract Council precluded from later condemning works. City Council cannot now complain of defects arising after 6 months. Refer Bateman's case and Marsden Urban District Council v Sharp and Another - 47 T.L.R. 549. Similar maintenance clause to present. Here no evidence defining accurately extent to which defects were discovered within 6 months of completion of each block. Mould said appreciated how bad work was in February 1956 - more than 6 months after acceptance of 11 blocks. Burden of proof on defence - they have not discharged it. Wevill even now has only examined 600' out of 850' - 5% of work. Defects not yet appeared in remaining 95%.

Concrete floors - 5 out of total number of 460. There recently examined concrete better. Reliable inference as to remaining 450 cannot be drawn. In respect of 11 accepted blocks contractor's liability governed by Clause 9(2). Contractor right to say prepared to do defects which appeared. Council wrong to insist on reconstruction. Exhibit 46 - Contract taken over in November because of that refusal. Council's

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Address for Ata Ul Haq 10th July 1957 continued taking over therefore amounted to a breach of contract. Absolves Plaintiff from necessity of obtaining certificate in respect of last 6 blocks or of performing maintenance work. If Council acted within their rights in ordering Contractor off site, Clause 23, Contractor entitled to benefit of covenants to be performed by Council under Clause 23, eg. completion of works without undue delay or expense - certify expenses properly incurred etc. Clauses 23 (4) and 23 (5).

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Wevill's report - 15,000/- - hearsay. No evidence to support it and no certificate as prescribed. No basis on which Court could make allowance to Council.

### Extras.

Submit evidence shows clearly verbal contract for part of extras for which no written variation order. Evidence undisputed. Council's officers expressly ordered extra work knowing it outside contract.

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# Molloy v Liebe (1910) 102 L.T. 616

Contractor induced to do work on understanding that variation order would be issued. Cannot now rely on own default to escape liability.

I abandon claim to 2 of 3 items. Do not abandon claim to Podo battens. Stone gave evidence - it should have been allowed.

### Costs.

Deductions may have to be made - eg. parging - single ply damp course. Submit if Plaintiff substantially succeeds he should have costs included costs of counterclaim. Alternatively that City Council should not have costs unless they substantially succeed. Ask Stone's evidence be accepted - witness of truth. Defendant's - Arguments. Issues 3 and 4 - submit Dakin v Lee is to contrary effect. Narshidas M. Meta and Company Ltd., v. The Baron Verheyen (1954) Vol.21 E.A.C.A. 153, i.e. variations do not disentitle contractor to payment. McConnel said defects could be dealt with easily within scope of Retention Money. P.6 of notes at bottom - not fraud pleaded.

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P.9 - submit Keating contradicts submission.

In the Supreme Court of Kenya

Actuarial tables - not in accord with contract. If did apply - arbitrary.

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Multiplication of  $4\frac{1}{2}$  - small error in that figure would result in large error. 40 years - building out of date.

Address for Ata Ul Haq 10th July 1957 continued

Investment at 3% - not best obtainable.

Close of address for Defendant.

Schermbrucker on cases cited not previously mentioned.

Bombay Furniture case - Grove went away giving architect a virtual power of attorney. Equity Principle - submit no facts in this case to show Council would not act if work bad.

Bateman's case - Dakin v Lee - Nothing to say on E.A. case.

C.A.V.

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A. G. Forbes, J. 10.7.57.

Note: Analyses of samples of set concrete and mortar from Part B Ofafa Estate, which, by consent, were to form part of the evidence and be taken into account in the judgment, to-day received and filed with Exhibits, marked Exhibit 73.

A. C. Forbes, J. 16.7.57.

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No.21

## JUDGMENT

Judgment 6th September 1957.

### AT NAIROBI

# CIVIL CASE NOS: 170/56 and 1314/56

IN HER MAJESTY'S SUPREME COURT OF KENYA

ATA UL HAQ

v.

NAIROBI CITY COUNCIL

AND

NAIROBI CITY COUNCIL v. ATA UL HAQ

## JUDGMENT

These two Suits, which have been consolidated, arise out of a building contract entered into between Ata Ul Haq as contractor (whom I shall hereinafter refer to as the Contractor) and the Nairobi City Council (to which I shall refer as the Council) for the construction of certain housing at the Council's African Housing Estate at Ofafa, Nairobi.

In Suit No: 170/56 the Contractor, as Plaintiff, claims Shs. 190,018, comprising Shs.140,018 in respect of balance of the contract price for the work undertaken, including retention moneys, and Shs. 50,000 in respect of the amount of security which was deposited for due performance of the contract; and also claims that proper enquiries be made into the value of extra work alleged to have been carried out by the Contractor in connection with the contract and that payment be ordered of the amount found to be due in respect of extra work.

The Council, on the other hand, denies liability for the amount claimed, maintaining that the work has not been completed in accordance with the contract, and in Suit No: 1314/56 (in which the Council is the Plaintiff) claims Shs. 882,950 damages from the Contractor comprising, as to Shs. 826,849, the alleged cost of bringing the

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buildings up to specification or, where this is impracticable, the alleged reduction in the value of the building; as to Shs. 9,881/- the cost of a detailed survey and report on the work; and as to Shs. 46,220/-, excessive maintenance costs alleged to be required by reason of impossibility of bringing the buildings up to standard required by the specifications.

The facts leading up to these conflicting claims are as follows:-

In or about the year 1954 the Council undertook the development of an African Housing Estate at Ofafa. The projected estate was divided into sections for construction purposes, the particular section with which this case is concerned being known as "Part B". comprised 17 blocks of dwellings and ablution units with minor ancillary works. Tenders were invited for the construction of Part B, that submitted by the Contractor was accepted, and a contract for the carrying out of the work was duly entered into between the Contractor and the Council of 29th June, 1954. tract itself is a fairly brief document of four clauses, but it incorporates in the Contract the General Conditions of Contract of the Council, the Tender of the Contractor, the Specification prepared by the Council's Engineer, Schedule of Rates, and the Contract Drawings.

By Clause 17 of the Specification the Contractor was required to deposit with the Council the sum of Shs. 50,000 as security for the due performance of this contract, and this was duly done on 17th June, 1954. Repayment of this sum is one of the items claimed by the Contractor.

Clause 1 of the Contract provided that the contract price was £85,476, subject to variation in certain events. In particular there was provision for payment for authorised extras and additions not provided for in the specifications.

Clause 16 of the General Conditions provided for payments to the Contractor by instalments during the progress of the work on certificates issued by the City Engineer. Under Clause 15 of the Specification interim payments were not

In the Supreme Court of Kenya

No.21

Judgment 6th September 1957. continued

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No.21

Judgment 6th September 1957 continued to exceed 90% of the "work properly Executed". Upon "the satisfactory completion of the work" and its being taken over by the Council, the Contractor was to be entitled to a certificate for 95% of the value of the work so executed. Thereafter the remaining 5% of the contract price was to be paid to the Contractor on the termination of a 6 month period of maintenance.

Clause 3 of the General Conditions required the work to be executed "under the direction and to the entire satisfaction" of the Engineer; the term "Engineer" being defined in Clause 1 as being "deemed to imply the City Engineer or such person or persons as may be duly authorised to represent him on behalf of the City Council of Nairobi or the successors in office of such person or persons and also such person or persons as may be deputed by such representative to act on his behalf for the purpose of this particular contract"

In practice, day to day supervision of the execution of the contract works was carried out by an African Housing Architect and a Clerk of Works, both of whom were employed by the Council.

Initially, the Architect was a Mr. Tanner and the Clerk of Works was a Mr. Stone. Mr. Tanner was succeeded as architect by a Mr. Mould who took over in June, 1955. Mr. Mould had been associated with the work since March, 1955, under Mr. Tanner, and it appeared that the works were about 80% complete when Mr. Mould came on the scene. Mr. Stone was succeeded as Clerk of Works by a Mr. Goodwin in about May, 1955.

In pursuance of the contract the Contractor entered upon the site and commenced work in June, 1954. Work proceeded, and in due course, eleven of the seventeen blocks provided for in the contract were completed, accepted in writing, and taken over by the Council. Payments were made to the Contractor on certificates issued by the City Engineer under Clause 15 of the Specification up to a total of Shs. 1,011,104/-, being 95% of the certified value of the work in respect of these blocks.

Of the remaining six blocks, four were completed and ready for inspection and the other two were complete except for minor details, when

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differences arose between the Contractor and the Council. Interim payments made to the Contractor in respect of these six blocks amounted to Shs. 493,398/-, being 90% of the certified value of the work done. These blocks were never formally accepted, but were in fact occupied by the Council after the Contractor had withdrawn from the site.

In the Supreme Court of Kenya

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Judgment
6th September
1957
continued

Before the hearing commenced, eleven issues were agreed by Counsel, as follows -

- 1. Is the Contractor's claim premature.
- 2. In the alternative is it barred by limitation wholly or partially.
- 3. Have the works been completed by the Contractor in accordance with the contract.
- 4. If so is the Contractor entitled to the sum claimed, or any part thereof in the absence of the final certificate.
- 5. If the answer to No:3 is in the negative in what respects has the Contractor failed to perform the Contract.
- 6. Has the Council waived any breach of contract by the Contractor wholly or partially.
- 7. Is the Council estopped from alleging such breaches or any of them.
- 8. If the Council is entitled to any damages in respect of such breaches how much.
- 9. Has the Contractor carried out the extra work as alleged in the Plaint.
- 10. If so to what sum is the Contractor entitled in respect thereof.

The bulk of the evidence in the case concerns alleged breaches of contract by the

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No.21

Judgment 6th September 1957 continued Contractor - that is, it relates to Issues Nos:3 and 5. Before I go into details of the alleged breaches, however, I propose to draw some general conclusions from the evidence, and also deal with the question of the extent to which the Council may be bound by acts of the City Engineer, the Architect in charge of the works and the Clerk of Works on the site in (a) waiving strict compliance with the specification, and (b) authorising additional work outside the specification.

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Five witnesses gave evidence for the Contractor, including the Contractor himself, and five witnesses were called on behalf of the Council. The Contractor's witnesses were Mr. S. McConnel a consulting engineer with some 32 years' experience in Kenya; Mr.C.W.Newlyn, a Chartered Quantity Surveyor of 34 years' experience of which some 7 have been in East Africa; Mr. R.V. Adamson, a chemist of the Public Works Department who gave evidence of the analysis of samples of concrete and mortar; and Mr. T.H. Stone, the Clark of Works who was on site till something over 80% of the work had been done and who has had nearly 50 years' experience of building, mostly in East Africa. The witnesses for the Council were Mr.R. F. Mould, a qualified Architect but with no previous experience in East Africa, who commenced supervision of this contract under Mr. Tanner (the original Architect in charge) in March, 1955, when work was about 80% complete, and who, in June, 1955, took over complete control as Architect upon Mr: Tanner's departure from Kenya; Mr. A.E. Wevill, a practising Architect and Quantity Surveyor with 38 years' experience in Kenya, who carried out a survey of the works in April, 1956, and wrote a report for the Council; Mr. Norman Fallon, Assistant City Treasurer, who gave technical evidence relating to the calculation of maintenance costs; Mr. T.H. Stone again, who was called as a witness for the Council as well as for the Contractor; and Mr. H. Thorpe, Storekeeper to the City Council, who gave evidence relating to the availability of damp course felting during the period that the construction of the works was in progress.

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Expert evidence as to the standard and quality of the buildings constructed was given by Mr. McConnel, Mr. Newlyn, Mr. Mould and Mr. Wevill. As is not unusual, there was very considerable

divergence between the opinions of the experts. Of the witnesses called, apart from the Contractor himself, only Mr. Stone and Mr. Mould gave evidence as to the progress of the work on site, and, of course, Mr. Mould's evidence on progress only related to the latter part of the work as he only came on the scene when the works were 80% complete. Conversely, Mr. Stone's evidence only covers the first 80% or so of the work. Mr. Tanner, the Architect in charge up to the time Mr. Mould took over, and Mr. Goodwin, the Clerk of Works who succeeded Mr. Stone, were not called as witnesses by either party. Mr. Tanner, it appeared, was no longer available in Kenya, but Mr. Goodwin was available in Kenya and could have been called had either party so wished.

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I consider Mr. Stone's evidence to be of great importance in the case since it covers the major part of the progress of the work under the contract. Mr. Stone was an impressive witness and appeared genuinely impartial. In general, I accept his evidence as a reliable account, so far as he saw it, of the progress of the work under the contract, and the dealings between the Contractor on the one hand and Mr. Tanner and himself on the other.

I may mention here that there has been no suggestion made of the existence of any fraudulent collusion between Mr. Tanner or Mr. Stone and the Contractor. And I may as well dispose of one point in the pleadings forthwith, namely the allegation (which I allowed, with some hesitation, to be inserted by way of amendment in the Council's pleadings after the commencement of the hearing) that the Contractor was guilty of fraud in that he "falsely alleged and misrepresented verbally to the Defendant's Clerk of Works and/or Architect from time to time and stage by stage of the contract that the works had been well done according to specification and such of the works as were taken over by the Defendant (i.e. the Council) were taken over in that belief". I do not consider that there has been any evidence which can support this allegation and Mr. Stone stated categorically that he did not rely on statements made to him Contractor but relied entirely on his own observation. I find, accordingly, that the fraud alleged has been disproved.

In the Supreme Court of Kenya

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Judgment 6th September 1957 continued

No.21

Judgment 6th September 1957 continued As regards Mr. Mould, I cannot, with the greatest respect to him, accept his evidence as entirely impartial. He clearly had strong feelings about the matter, perhaps with some justification from his point of view, and while I do not for a moment suggest that this led to any deliberately untruthful statement on his part, it certainly coloured his evidence and, I consider, gave rise to a tendency to exaggeration.

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Taking the evidence of Mr. Stone and Mr. Mould together, a very clear general picture emerges. I do not think it is disputed that the Council were seeking to erect cheaply priced buildings in this Housing Estate, and that this contract did envisage a low, or shall I say, economical, standard of work. This, of course, is no excuse for an even lower standard than is called for by the specification. There is, however, some latitude for interpretation of the specification, and it is perfectly clear that during his term of office as Architect in charge of the contract, Mr. Tanner deliberately allowed a low standard of work within the specification, in a number of instances below specification, while Mr. Mould on arrival, no doubt performing the function of a new broom, did his best to insist on compliance with a far higher standard. The position is really summed up by Mr. Mould's admission in cross examination when he agreed that a different standard is being applied now, when he whole-heartedly condemns all the blocks of buildings, from that applied when acceptance of certain of the blocks was recommended to the Council. I accept Mr. Mould's evidence that when he drafted letters of acceptance in respect of five of the blocks he was not fully aware of the general character of the buildings. He had, of course, not seen the major part of the work being carried out; and I have no doubt that he was sincerely shocked when he did discover the standard to which the building had been carried out and considered it was a scandalously low standard. I do not accept, however, that the Council, through its officers, had no knowledge of the standard to which the works were being built. It is clear from Mr. Stone's evidence that Mr. Tanner was in general fully aware of the standard of the work that was being done and accepted it, and there is some evidence that this knowledge and acceptance

was shared by more senior officers of the Council. Mr. Mould stated that he did not recommend acceptance of the five blocks of buildings without protest, but that he was overruled. He said that he indicated his objections to Mr. Roberts, then City Engineer, and that later, when Mr. Saunders was Acting City Engineer, he explained his grounds of objection to Mr. Saund-Mr. Mould said that Mr. Saunders ers in detail. put it to him often that he (Saunders) would have to put it to the Council, and Mr. Mould also said that there were many meetings between Heads of Departments. Mr. Mould was not present and was unable to say what was put to the Council or what was discussed at the meetings of Heads of Departments, and no other evidence does indicate that Mr. Mould's superior officer, and possibly the Council itself, was at one time prepared to accept a lower standard of work than he was.

However this may be, I am satisfied that, with certain exceptions to which I will refer later, Mr. Tanner, and Mr. Stone on Mr. Tanner's authority, a low standard of work; and that in many cases work was authorised or knowingly accepted which was not strictly in accordance with specification. I am also satisfied that on occasion Mr. Tanner directed work to be done which was additional to specification. It seems equally clear that notwithstanding the provisions of the contract documents, to which I will refer in detail presently, practically the whole of the dealings between Mr. Tanner (and later Mr. Mould) and the Contractor were on a verbal basis and that the Contractor accepted and gave effect to verbal directions given him by Mr. Tanner. Written variation orders for additional work in accordance with the contract appear to have been issued in only three cases, that is, Exhibits 18, 19 and 20.

There is one matter in the evidence to which I should perhaps refer specifically, and that is Mr. Mould's statement that on one of his inspections on Block 38 A in a number of the inspection holes which had been dug he found hard mortar had been put into the foundations in the part exposed, — in the holes in place of defective mortar — that is, in effect, that there was a deliberate attempt by the Contractor to

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Judgment 6th September 1957 continued conceal defective work. There was a conflict of evidence on the matter, since Mr. Mould stated that the Contractor was present when the concealment was found, and that he then and there accused the Contractor of doing it. The Contractor denied both the concealment and having been accused of it. Mr. Mould also stated that Mr. Goodwin and Mr. Thomas saw where the hard mortar had been put in, but, of course, neither of those gentlemen gave evidence. It also appeared that there was no note of Mr. Mould's on the file mentioning the discovery of this alleged attempt at concealment.

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In these circumstances I hesitate to find as a fact that the act of concealment was carried out by the Contractor. Mr. Mould denied that there was any possibility of his having confused the scene of the incident described, or that it might have taken place at the site of one of the neighbouring contracts which were under construction i.e. either Part A or Part C of the Ofafa Housing Estate, on which the evidence suggested that the standard of work was a good deal lower than that on this contract site. Nevertheless I find it difficult to exclude a suspicion that this may have occurred.

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However, apart from this, I do not think the incident is really very material. If it is true, it reflects very adversely on the Contractor's credibility and honesty, but it does not in itself establish the existence or extent of defects. And as regards the Contractor's credibility, I do not in any case base my findings of fact on his evidence.

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I come now to what is perhaps the most difficult and most important question in the case, namely the extent to which the acts of the City Engineer, Architect and Clerk of Works are binding on the Council. It is, I think, necessary to refer to the relevant provisions of the contract documents in detail, and I consider the following provisions relevant. For convenience I set them out in full here even though I have already mentioned some of them.

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Clause 2 of the Contract provides -

" In case the Engineer thinks proper at any time during the progress of the works to

make any alteration in or addition to or omissions from the works or any alteration in kind or quality of the materials to be used therein and shall give notice thereof in writing to the Contractor the Contractor shall alter add to or omit as the case may require in accordance with such notice but the Contractor shall not do any work extra to or make any alteration or addition to or omission from the works or any deviation from any of the provisions of this contract without the previous consent in writing of the Engineer,.....and no claim for any extra shall be allowed unless it shall be carried out by or under the authority of the Engineer herein mentioned".

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The term "Engineer" is defined in the Contract to mean the City Engineer, and Clause 4 provides that the other contract documents are to form and be deemed part of the contract except where they are varied by or are inconsistent with the terms of the Contract itself.

In the General Conditions of Contract are the following provisions, which I think are relevant -

"l. (i) ENGINEER. The Term "Engineer" wherever used hereinafter and in all contract documents shall be deemed to imply the City Engineer or such person or persons as may be duly authorised to represent him on behalf of the City Council of Nairobi or the successors in office of such person or persons and also such person or persons as may be deputed by such representative to act on his behalf for the purpose of this particular contract. During the continuance of this contract, any person acting for the Engineer, or exercising his authority, or any successor in office of such Engineer, shall not disregard or over-rule any decision, approval or direction given to the Contractor, in writing, by his predecessor, unless he is satisfied that such action will cause no pecuniary loss to the Contractor or unless such action be ordered as a variation to be adjusted as hereinafter provided.

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- (ii) APPROVED AND DIRECTED. The terms "Approved" and "Directed" wherever used hereinafter and in all contract documents shall mean the approval and direction in writing, of the Engineer."
- "2. (i) The Contractor shall at his own risk and cost execute and perform the Works described in the Contract Agreement and detailed in the Specification and Drawings provided and supplied to the Contractor for the purpose of the Works and completely finish the said Works in a good and workman like manner with the best materials and workmanship and with the utmost expedition, in accordance with the said Contract Agreement, Specification, and Drawings, which shall have been signed by the Contractor and the Engineer, and in accordance with such further drawings, details, instructions, directions and explanations as may from time to time be given by the Engineer.

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- (ii) The Contractor shall satisfy himself as to the correctness of all drawings and measurements. If the Contractor finds any discrepancy in the Drawings or between the Drawings and Specification, he shall immediately refer the same to the Engineer who shall decide which shall be followed."
- "3. The said works shall be executed under the direction and to the entire satisfaction in all respects of the Engineer....."
- "9. (i) All materials and workmanship shall be the best of their respective kinds and shall be provided by the Contractor, except as may be otherwise particularly provided by the Specification or directed by the Engineer, and the Contractor shall, upon the request of the Engineer, furnish him with proof that the materials are such as are specified. Engineer shall at all times have power to 40 order the removal of any materials brought on the site, which, in his opinin, are not in accordance with the specification or with his instructions, the substitution of proper materials and the removal and the proper reexecution of any work executed with materials

or workmanship not in accordance with the Specifications and Drawings or instructions, and the Contractor shall forthwith carry out such order at his own cost.

(ii) Any defect which may appear, either of material or of workmanship, during the period of maintenance provided by the Contract, shall be made good by the Contractor at his own expense, as and when directed."

"16. Payment shall be made to the Contractor by instalments in accordance with the provisions of the Specification under the Certificates therein stipulated to be issued by the Engineer to the Contractor.

No Certificate so issued by the Engineer shall of itself be considered conclusive evidence as to the sufficiency of any work or materials to which it relates so as to relieve the Contractor from his liability to execute the works in all respects in accordance with the terms and upon and subject to the conditions of this Agreement or from his liability to make good all defects as provided thereby".

"17. (i) The Engineer may at any time during the progress of the Works, by order in writing under his hand, make or cause to be made any variations from the original Specification and Drawings by way of addition or omission or otherwise deviations under his direction and to his satisfaction, as if the same had been included in the said original Specification and Drawings, and any work or materials which shall be ordered not to be done, or used, shall be omitted or shall not be used by the Contractor".

"18. (i) No variations shall vitiate the Contract and all extras and omissions authorised as herein provided for which a price may not have been previously agreed upon, shall be measured and valued by the Engineer ....."

And lastly, Clause 26 provided for reference to arbitration -

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The Specification requires the work to be done and materials to be provided under the supervision of and to the entire satisfaction of the City Engineer and individual items in the Specification contained specific reference to approval by the City Engineer e.g. Clause 25, which requires the bottoms of trenches for foundations "to be approved by the city Engineer before concrete is laid".

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It is, I think, clear from those provisions and from the intract documents as a whole that the general control of the contract on behalf of the Council was in the hands of the City Engineer. The City Engineer could order variations and extras. The work was to be performed to the satisfaction of the Engineer. The Engineer was to issue certificates for payments. From the general tenor of the contract documents I think there can be no doubt that the intention was that the City Engineer should be the agent of the Council for the purposes of the contract, and, in fact, all dealings between the Contractor and the Council were conducted on the Council's side by the City Engineer or his subordinates.

Subordinated to the City Engineer were the Architect and the Clerk of Works. It is not easy to define their precise authority, particularly that of the Architect, under the contract documents. It was conceded that the Architect was in fact duly authorised to represent the Engineer under Clause 1 (i) of the General Conditions, and the General Conditions authorise the "Engineer" as therein defined to give directions in writing for extras and variations. On the other hand, Clause 2 of the Contract requires the extras and variations to be authorised by the City Engineer himself, and, by virtue of Clause 4 of the Contract, this provision must prevail over the provisions set out in the General Conditions. conclude that under the contract documents authority to orde extras or permit variations is limited to the Caty Engineer personally. And in fact

the only variation orders issued - Exhibit 18, 19 and 20 - were signed by the City Engineer himself. On the other hand I am satisfied that the Architect on behalf of the Engineer had authority under the contract to approve work and to give instructions and explanations within the scope of the specifications. The contract documents do not provide that "instructions" or "explanations" are to be in writing, though it is perhaps difficult to see what the difference is between an "instruction" and a "direction".

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As regards the Clerk of Works, any authority he may have had on behalf of the Engineer was obviously very limited. On the evidence I conclude that he was in certain matters deputed by the Architect to act on his behalf and therefore in respect of those matters falls within the definition of "Engineer" in the General Conditions. Mr. Mould, for instance, said that he ordered the taking up of a floor in Block 39 and deputed then the Clerk of Works, Mr. Goodwin, to see that it was done.

In the case of Mr. Stone it would appear that Mr. Tanner deputed him to see that work done was done up to the standard set by Mr. Tanner, but in the circumstances of the case I do not think this is very material. The evidence which I have accepted is to the effect that Mr. Tanner saw and approved or directed certain standards of work, and that work seen by Mr. Stone though not by Mr. Tanner came up to those standards. It is therefore of little moment whether or not Mr. Stone was authorised to accept that work.

As I have stated, the contract documents expressly provide that the work is to be done to the satisfaction of the Engineer. Considerable argument turned on whether and to what extent the certificates for interim payments and the acceptance of certain blocks were conclusive in this respect.

There is no provision in the contract documents that the certificates are to be conclusive. On the contrary Clause 16 of the General Conditions provides that -

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It is abundantly clear from this that no such certificate is conclusive as regards any latent defect - that is any defect of which the Engineer was not aware. The position, however, appears to me to be vitally different where the Engineer (or the Architect acting on his behalf) was fully aware of the alleged defect and accepted it - in some cases directed it. Clause 9 (i) enables the Engineer during the course of the work to order the removal of materials and the re-execution of work not up to specification. Where the Engineer has not made use of this Clause but with full knowledge has accepted work as satisfactory and subsequently issues a certificate in respect of that work, I consider that the certificate must be held to be conclusive in so far as the Engineer had knowledge of the quality of the work and materials; that the issue of the certificate operated as a waiver of strict compliance with the specification; and that the Engineer cannot subsequently exercise the power conferred by the clause (Hudson on Building Contracts, 7th Edition, p.239 citing Addock's Trustee v Bridge R.D.C. (1911) 75 J.P. 241).

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It was argued, relying on Robins v Goddard (1905) 1 K.B. 294, that by virtue of the arbittration clause the certificate could not be held to be conclusive. The arbitration clause does not expressly provide that the arbitrator shall have power to open up and review any certificate, as was the case of the contract considered in Robins v Goddard. I would, however, accept the proposition that by virtue of the arbitration clause the certificates issued are not conclusive, but I do not think this adds anything to the express provisions of Clause 16 of the General Conditions.

The basis of my finding is that under this contract the Engineer was the agent of the Council for the purpose, inter alia, of passing the work as satisfactory. There is some reason to believe from the evidence that the City Engineer, by reason of personal visits to the site, must have been aware from his own observation of the general standard of the work of the Contractor; but in any case, as I have said, it has been conceded that the Architect was duly authorised under Clause 1 (i) of the General Conditions to represent the Engineer, and I consider that the knowledge of the Architect must in the circumstances be regarded as the knowledge of the Engineer; and acceptance of work by an owner (or his agent authorised in that behalf) with knowledge of defects does disentitle the owner from claiming for those de-(Halsbury 3rd Edition, Vol.3, p.454 and Bombay Furniture Works v Gross, E.A. Civ. App. 94 of 1955 (unreported).

I consider this is clearly the position in so far as the standard of work within the terms of the Specification is concerned. There is evidence that the standard was deliberately relaxed on account of difficulties arising from the Emergency and anxiety that the work should not be delayed.

The position is more difficult as regards work which amounts to a variation from the terms of the Specification. This was permitted, or in some cases, directed, by the Architect for the same reasons, but as I have said, under the contract variations were required to be in writing and to be authorised by the City Engineer personally. Nevertheless, in view of the conflict between the provisions of the Contract and the General Conditions, and of the fact that the general conduct of the contract was left in the hands of the Architect, I consider that the Architect was held out as having authority to waive strict compliance with details of the specifications, and that such waiver by the Architect is therefore binding on the Council.

It appears to me in fact that certificates

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A fortiori, where blocks have been accepted in writing by the Engineer with knowledge of defects, I consider the acceptance is binding on the Council as a waiver of the defects.

As regards extras claimed by the Contractor. I am of the opinion that the position is different. Where, as in this case, extras are required to be ordered in writing, it would appear that the builder can refuse to perform additional work not ordered in writing, but if he does perform such work without written orders, he cannot recover payment therefor (Halsbury, 3rd Edition, Vol. 3, p.482, paragraph 941, and the cases there cited). The circumstances in this case come very close to being a waiver of the condition; but it would appear that something more than a mere verbal order is necessary to amount to a waiver in the case of extras. (Halsbury, 3rd Edition, Vol.3, p.480, paragraph 934). I hold therefore that as a general proposition the Contractor cannot recover for extras which have not been ordered in writing. There are exceptions to this where it can be said that extras are entirely outside the contract, or where a promise to pay can be implied, and I will examine this aspect whe I deal with the details of the extras claimed.

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I propose now to deal as briefly as I can with the individual defects alleged by the Council in the order in which they are alleged in the Council's pleadings.

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(a) It is alleged that excavations were not carried down to rock or murram suitable for foundations, and that black cotton soil was not all removed from the trenches before the foundations were put in.

The specification calls for the trenches for foundations to be excavated down to a solid hard rock or murram bottom and levelled, and for all black cotton soil to be removed.

These allegations, as is the case with most, if not all the allegations, are based on the report dated 21st August. 1956, made by Mr. Wevill, which was in evidence as Exhibit 61. That report certainly indicates that Mr. Wevill considered that black cotton soil had been left under the foundations, but in evidence he stated that he was not prepared to say that the Contractor left black cotton soil under his foundations. Mr. Stone stated that he saw all black cotton soil removed from the foundations. In the circumstances I find that the allegation that black cotton soil has been left under the foundations has not been proved.

As regards the requirement that the excavations be carried down to hard rock or murram, Mr. Stone stated that trenches were checked by himself with a pick for solidity and that he was satisfied that they were dug down to hard, rock - there was no murram on the site. Mr. Wevill's opinion from his inspection was that the foundations appeared in most cases to be laid on decomposed rock. There appeared to be some conflict between the experts as to whether or not decomposed rock would be adequate for the foundations, but Mr. Wevill did state that with reasonably good concrete it should be adequate to support the build-It seems probable that the trenches were in fact not strictly in accord with the specification requirement that the excavation should be down to "solid hard rock", and I so find. TIt also seems that on the basis of the concrete being up to specification, the failure to excavate to "solid hard rock" would not make any material difference to the building, and I accept that this was the

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Judgment 6th September 1957 continued case. I am also quite satisfied that both the Clerk of Works, Mr. Stone, and the Architect, Mr. Tanner, were fully aware of the degree to which the trenches had been excavated and accepted it as a compliance with the specification.

(b) It is next alleged that the bottoms of the trenches for the foundations were not levelled off as required by the specification.

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Mr. Wevill stated that in some cases there were rock outcrops which had not been levelled. Mr. Stone stated that trenches were dug down into the boulder sub-stratum, and that it was difficult to achieve a very smooth surface, but the trenches were levelled to his satisfaction and that in his opinion the Contractor did achieve a satisfactory bottom. He also stated that Mr. Tanner approved the trenches. On the evidence I have reached the conclusion that there was not a strict compliance with the specification, but I am also satisfied that Mr. Tanner and Mr. Stone were duly aware of what was done and accepted it.

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(c) The next complaint in regard to the foundations is that the concrete mix was not 1:3:6 cement, sand and aggregate or was not properly mixed or laid.

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A great deal of the evidence in the case was concerned with the state of the concrete and mortar of the foundations, floors and walls and it is convenient to deal now generally with the whole question of the concrete and mortar that was used in the construction of these buildings. The evidence generally regarding the concrete and mortar was extremely conflicting and showed considerable divergence of opinion among the witnesses who gave expert evidence. The tests of samples taken also gave conflicting results which it is difficult to reconcile. analysis results of four sets of samples were in evidence, together with the

analysis result of a single sample of mortar apparently taken in June, 1956, during an inspection of the site by the Commission which was at that time enquiring into affairs of the Council. These analysis results are set out in Exhibits A.C.65, 66 and 73.

Exhibit A relates to a set of samples taken by Mr. Wevill; Exhibit C relates to samples taken by Mr. Mould; Exhibit 65 relates to the single mortar sample I have referred to above; Exhibit 66 relates to a set of samples taken by Mr. Goodwin; and Exhibit 73 relates to a set of samples taken by arrangement between the parties during the hearing, the analysis of which was, by consent, to form part of the evidence in the case. general, Exhibits A and C would appear to indicate a standard of concrete and mortar mix far below specification, while Exhibits 65, 66 and 73 would appear to indicate a standard substantially in accordance with specification.

Mr. Mould, it is true, stated that he took the samples referred to in Exhibit C from the bad places he found, so that the figures in Exhibit C would not be typical of the whole of the work.

Mr. Wevill, however, stated his samples were taken at random, as were the samples referred to in Exhibits 65, 66 and 73.

Apart from the analysis results, Mr. Wevill and Mr. Mould in general condemned the concrete and mortar work as seriously sub-standard, while Mr. McConnel and Mr. Newlyn (both of whom gave expert evidence for the Contractor) did not agree that the mortar and concrete appeared unduly weak. Mr.Stone's evidence was that while he was Clerk of Works he was in the habit of making spot checks of concrete which had been mixed, and also used to watch the mixing process. He was not, of course, in a position to watch the mixing of the whole of the concrete and mortar used, the evidence being that about one third of his time was devoted to the supervision of this contract.

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Judgment 6th September 1957 continued However, he stated that he satisfied himself by field tests, that is, by testing by hand or knife, that the concrete and mortar appeared to be up to specification. He did say that on occasion he found the wrong mix being made and rejected it. It is not unreasonable to suppose that wrong mixes also occurred in his absence, and that these did go into the buildings.

Another factor besides the question of the actual proportion of cement to sand and aggregate, is whether the mixing was properly carried out and whether the concrete or mortar was sometimes allowed to set partially before being used. In either of these cases the strength of concrete or mortar, as the case might be, would be seriously affected. There has been evidence of labour difficulties owing to the Emergency at the time work under the contract was being carried out, and of difficulties in supervision of the labour, and I consider it probable that bad mixing and use of concrete and mortar which had stood too long did occur.

Finally, when, during the course of the hearing the Court visited the sitē, Mr. Stone carried out a number of field tests of the mortar in the walls of the buildings, and he stated subsequently in evidence that on the whole the external mortar which he tested was of very reasonable quality though in one place he did see definitely weak mortar.

My conclusion from this mass of conflicting evidence is that the complaints of weak concrete and mortar have been exaggerated, but that a proportion of weak concrete and mortar did go into the work. This, I consider, is indicated by the evidence to have been due to poor or inadequate supervision rather than to any deliberate attempt at fraud on the part of the Contractor. And it is of course evident that neither Mr. Tanner nor Mr. Stone was aware of the fact when a bad or weak mix went into the structure, though I am satisfied that concrete and mortar as a whole was approved by them.

Applying these general conclusions to the complaint regarding the foundation concrete, I find that there was a proportion of this concrete

which was not up to specification or was badly mixed and therefore unduly weak, and that the Architect and Clerk of Works were not aware of the fact that this weak concrete had gone into the buildings.

(d) Next is a complaint that the concrete foundations did not conform to drawings in respect of width or projection beyond the face of the walling built thereon.

The drawings call for an 18 inch concrete foundation with a 6 inch projection on either side of the wall. Mr. Stone stated that the concrete was set out 18 inches wide, but that the width of the wall sometimes exceeded 6 inches and so reduced the projection. According to Mr. Wevill, the projection was irregular - in some places more than 6 inches, in others less, and Mr. Mould also gave evidence that the projection was in many cases less than 6 inches - he said that in many places the projection was only one or two inches. this evidence I accept that a consistent 6 inch projection has not been maintained and that in places the projection is substantially less than 6 inches. I am satisfied, however, that what was done seen and accepted by Mr. Tanner and Stone.

(e) The next complaint is that the stones used in the foundations were not of regular shape or square cut, and that some soft stone was used. Once again there was considerable conflict of evidence as whether the stone used complied with the specification requirement (Clause 15) that it should be "first quality local stone... ....quarry dressed with all corners square and regular". It was clear from the evidence that this specification permitted considerable latitude in interpretation. accept that there is a difficulty in reconciling the provision that the stone used is to be "quarry dressed" with the requirement that all corners were to be square and regular, and that owing to the Emergency the standard of "quarry dressing" had deteriorated. I am quite satisfied on

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(f) The next allegation is that the cement mortar was not 1:4 mix as specified or not properly mixed or laid. I have already dealt with the subject of mortar when I dealt with the concrete.

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My finding is that a proportion of the cement used was not up to specification or was badly mixed or laid, and that this was not known to the Architect or Clerk of Works.

- (g) The next complaint is that the hoopiron reinforcement was not laid as specified. This is also mentioned in Mr.Wevill's
  report, but the evidence concerning it seemed somewhat indeterminate. There may have
  been some failure to comply strictly with
  specification, though Mr. Stone said hoopiron banding was used, but, if so, it does
  not appear that any very material difference to the building would have resulted.
- (h) Finally, it is complained that the buttresses did not conform to drawings. In Mr. Wevill's report it is stated that the buttress foundations in many cases start off the concrete floor and do not rest on the concrete foundations. I cannot find that much evidence was given on this point, though in relation to the kitchen stack Mr. Stone stated that he brought up the question of foundations with Mr. Tanner, who directed that the kitchen "breast" should be built on the floor. At least I am satisfied that the Architect and Clerk of Works must have been aware of what was done and approved it.

The next series of complaints concerns the floors.

(a) It is complained that the excavations were not carried down to rock or murram and the black cotton soil was not all removed. What I have said regarding the similar complaint in relation to the foundations applies. I am not satisfied that it has been proved that any significant amount of black cotton soil was left, nor am I satisfied that the excavation was not carried down to "rock or murram suitable for foundations". In any event, I am satisfied that the Architect and Clerk of Works were fully aware of what was done and accepted it as satisfactory.

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(b) The next complaint in regard to the floors is that the filling material was not according to, and the laying and ramming was not carried out according to specification. This complaint gives rise to the largest single item of damages for defects claimed by the Council.

The Specification (Clause 26) provides that the fill in between walls shall be: "Approved hard, dry, broken stones, in layers not exceeding 6" up to underside of floor slab and ram each layer". It is alleged that the filling consisted of large boulders up to 2' long or irregular shape with considerable voids between; that these were not and could not be laid in 6 inch layers; that in the absence of small filling in the voids these boulders could not be adequately rammed; and that though the specification did not mention the filling of the voids, this was implicit in the requirement that the work be done "in a good and workmanlike manner".

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The Court visited the site and saw a test hole showing a sample of the filling which was stated to be typical. The boulders used for filling were undoubtedly larger than could go into a 6" layer. Mr. Stone, in reference to this test hole, said in evidence that the rock fill was similar to what he had seen going into the buildings; that the boulders were of considerable size and length, but as regards

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Judgment 6th September 1957 continued depth he did not notice anything more than some 9". He agreed that ramming was difficult with hard core of this nature in the absence of small filling, but stated that in fact he had seen ramming done during the course of construction and had watched it many times. There obviously was no filling between the boulders except in the top few inches. There is no specific requirement for such filling in the specification, but it was pointed out that in one of the contract drawings (No.3183/AH/2/14) filling between the boulders is indicated by a series of dots.

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Mr. Stone stated that the question of filling the voids was discussed with Mr. Tanner during the construction, and that Mr. Tanner did not agree to the filling of the voids because of the added expense. So far as the dots in the drawing indication filling of the voids between the large stones is concerned the matter would appear to fall within Clause 2 (ii) of the General Conditions which provides that in the event of any discrepancy the engineer shall decide which is to be followed. Incidentally, drawing No. 3185/AH/2/15, which deals with the oblution units, shows a hard core filling which bears a striking resemblance to that seen by the Court. In the circumstances, I am not satisfied that the absence of small filling between the larger boulders is a non- compliance with the Specification or drawings. I accept that the hard core filling without such small material is unlikely to be satisfactory, but this appears to have been the provision in the Specification and certainly was accepted as such by the Architect, Mr. Tanner.

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that ramming of a sort was undertaken but it is clear that the ramming would not be very effective in the absence of small material. The boulders used were undoubtedly larger than would go into 6" layers. Once again there seems to be some discrepancy between the Specification and the drawing, as the boulders shown in the drawing would appear to be much larger than 6" in depth, but the Specification in this case must I think prevail, and therefore there has been a breach of the terms of the Specification. However, I am fully satisfied that both the Clerk of Works, Mr. Stone, and the Architecs, Mr. Tanner, saw the hard core fill-

ing that was being put in and approved both the

On Mr. Stone's evidence I am also satisfied

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type of stone used and the method of laying.

(c) It is next complained that the concrete floor and screed do not conform to the drawings in thickness.

> The evidence indicates that there was some variation in the thickness of the concrete and screed. However, I am satisfied that this was not a concealed defect. Stone stated that he checked the floors for thickness. He said that he and his assistant put down pegs for levels and saw that the floors came up to these levels. The floor thickness were therefore in accord with the directions given by the Clerk of Works, Mr. Stone, and were clearly approved by him.

(a) It is further complained that the concrete floor was not up to 1:3:6 mix as specified, or not properly mixed or laid.

> Once again what I have already said regarding mortar and concrete applies, and I am of the opinion that a proportion of the concrete was either not of the correct mix or not properly mixed or laid, and that this defect was unknown to the Clerk of Works and Architect.

## The next series of complaints concerns the superstructure walling.

30 (a) It is complained that the stones used were not of regular shape or square cut, and that some soft and porous stone has been used.

> I have already dealt with stone used for foundations, and my remarks apply to the stone used for superstructure walling as well. I am satisfied that the stone used was seen and approved by the Architect and Clerk of Works. Mr. Stone stated that he had discussed the quarry dressed stone with Mr. Tanner and that Mr. Tanner was satisfied with it.

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- (b) Once again it is complained that the cement mortar was not up to specified mix, or not properly mixed or laid, and as I have already stated, I have reached the conclusion that the complaint is justified with regard to some proportion of the cement mortar, and that this defect was not known to the Architect or Clerk of Works.
- (c) It is complained that the hoop-iron re-inforcement was not according to Specification. The Specification (Clause 21) required walling to be reinforced in each alternate course with 34" wide hoop iron.

The evidence indicated that this requirement had not been strictly complied with in all cases though it was difficult to reach any conclusion as to the extent to which the requirement had not been complied with. In any event, it did not appear that the non-compliance would make any very material difference to the building.

(d) It is complained that the damp course was in single ply and not 3-ply material as specified, and not set in bitumen on a screed bed.

There was conflicting esidence as to the availability of 3-ply material for the damp course. Mr. Stone said that there was difficulty in getting the 3-ply and that 1-ply was used with his approval. He agreed that in some cases bitumen was not used but said that he was aware of this and did not order it to be redone as he regarded the cement screed as a more satisfactory damp course. He also said that he informed the architect, Mr. Tanner, and that Mr. Tanner did not disapprove. In the circumstances I accept that the Specification was not complied with. I am satisfied that Mr.Stone and Mr. Tanner were aware of the use of single ply material and approved it, and in some cases accepted the lack of bitumen, but it appears probable that there were many instances where bitumen was omitted without their knowledge.

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(e) It is complained that the internal faces of walling were not dressed off to a fair face.

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There appears to be considerable divergence of opinion as to what constitutes a "fair face". One thing, however is perfectly clear, and that is that noone who saw these buildings could possibly fail to be aware of the type of wall face provided. Buildings were accepted with this type of face not only while Mr. Tanner was Architect, but also when Mr. Mould was Architect. The City Engineer, himself, when visiting the site, could not fail to have been aware of the type of face left on the walling. I am fully satisfied that the faces of the walling were accepted as a compliance with the Specification up to the time when the last six blocks were ready for final inspection.

(f) The next complaint is that the external faces of walling were not "struck jointed" as specified.

This apparently is correct, but Mr. Stone stated that Mr. Tanner expressly gave instructions to himself and the Contractor that "flash joints" were to be substituted for struck joints, and that Mr. Tanner saw the results of his direction and seemed satisfied. Mr. Mould also said that he had raised the matter with Mr. Tanner, who stated that he had directed what was to be done. I am satisfied that the Architect was aware of and accepted what was done.

frames were not properly set or fixed.
Once again there seemed to be some divergence of evidence on this subject. It appears to me that the Architect and Clerk of Works were aware of what was being done in general, though in particular cases it may be that the door frames were badly set without this being noticed at the time. This would seem to be a

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Judgment 6th September 1957 continued matter which it should be easy to pick up either during inspection of the buildings prior to the taking over or during the maintenance period. Nevertheless it probably does constitute a breach of contract for which the Contractor is responsible.

(h) It is stated that chamfered edges were not formed at window openings as specified.

It appeared that a slope was given to window ledges by cement filling instead of by cutting away the stone. It was not very clear to me on the evidence that "chamfering" necessarily referred to the cutting away of the stone as against building up the ledge with mortar, but in any case what is obvious is that the Architect must have been fully aware of what was done and that he raised no objection, and that Mr. Stone stated that he had raised no objection.

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(i) It is complained that the flues were not properly parged.

This is correct, but it would appear that the Architect and the Engineer himself were aware of the fact. Mr. Stone has stated that Mr. Roberts, Mr. Mould and Mr. Saunders had a meeting on the site and a meeting in the Town Hall regarding this. I think it must be accepted that the Engineer was aware of the failure to parge when he issued certificates.

(j) It is said that steps were not set on hard core back filling.

It appeared that the steps were set on some hard core back filling, but that the back filling was not carried down to rock. It is certainly not clear to me that this is required by the Specification. In any case, I am satisfied that the Architect was aware of what was done, and accepted it.

(k) Pinally, it is complained that the boundary walls were not bonded or tied as specified.

Mr. Stone stated that it was decided by the Architect at the site that one wall should be bonded and one left free at the junction of the next building, and that what was done was instructed by himself and the Architect. I accept that the Architect was aware of and accepted the work on the boundary walls.

The next series of complaints relates to the roof and joinery.

(a) It was complained that the roof timbers were lap jointed and nailed with wire nails, the timbers not framed, screwed, or halved at joints, and nails used were not long enough to go right through for clenching on one face.

Once again there appeared to be a considerable divergence of opinion as to the precise meaning of the Specification and what would be called for by standards of "good workmanship". At the least I am satisfied on the evidence that the Architect and Clerk of Works saw and approved the type of work done.

(b) It is stated that no wall plates were provided as shown in the drawings.

As regards this, Mr. Stone stated that this was done on instructions because the wall was carried up to the tiles and thus displaced the wall plate.

(c) It is further complained that valleys were formed with 6" x 1" boards instead of 9" x 1" boards, that there were no fillets on the upper edges, and that the valleys were lined with galvanised sheeting 15" in girth instead of 18".

Mr. Stone stated that he consulted the Architect in regard to the valleys and that the modifications complained of were effected on the definite instructions of the Architect. There can be no question but that the Architect was aware of what was done.

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Judgment 6th September 1957 continued (d) It is complained that the door and window frames were not fixed with metal cramps, that door hinges were not as specified, and were fixed with screws without any bolts.

The evidence indicates that there was not a compliance with Specification in that screws and not bolts were used, but it is also clear on the evidence that the variations were known to and accepted by the Architect and Clerk of Works.

(e) Finally, it is complained that the doors of the ablution blocks were not hung to be self-closing as specified.

It appeared that types of spring closing device were used on these doors and that as a general rule the doors were not set so as to close on their own account. This is an apparent failure to comply with the specification, but is not a matter which can be concealed. Both the Architect and Clerk of Works must have been aware of what was done.

Complaints were made regarding the drains, that they were not laid to adequate falls, that excavation was inadequate, that no hard core back fill was put in and that the cement mix was not up to 1:3:6 as specified, or not properly mixed or laid.

The Specification (Clause 67) states that the Contractor is to allow for excavating, and providing and laying drain blocks to falls as directed on a 3" murram bed. It does not appear that the drains, whether effective or otherwise, were not in fact laid as directed. The type of drain laid must have been obvious to the Clerk of Works and Architect. As regards the cement mix I am prepared to accept that some proportion of this was not up to Specification.

There may be some other matters in respect of which complaint has been made which I have not touched on, but these would be of minor importance. In any case I do not think that they fall into the category of having been accepted by the Architect without knowledge of the defect.

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The third Issue is as to whether the works have been completed by the Contractor in accordance with the contract. On the principle of Dakin v. Lee (1916) 1 K.B. 566, I take this as a question whether there has been a substantial compliance with the contract or whether the contractor abandoned the contract or the work done is such that the result is something entirely different from the work which the Contractor contracted to do and is useless to the Council. In my opinion, the work in this case has been substantially completed, though with some defects, and also with variations from the Specification which have been either directed or accepted by the Engineer, or by the Architect as the Engineer's deputy. There was, I think, some suggestion that there might have been a refusal on the part of the Contractor to perform the contract because when differences arose between the Council and the Contractor the Contractor left the site, and refused to carry out instructions as to repairs or to complete the buildings. However, the repairs in issue largely relate to the alleged defects with which this case is concerned, and apart from that it is clear that the buildings were substantially complete apart from some minor details (Exhibits 31 and 34). I do not consider that the Contractor can be said to have abandoned the contract. On the principle stated in Dakin v. Lee, I accept that the Contractor is entitled to recover the contract less so much as may be found ought to be allowed in respect of items which are defective.

On the basis of my findings so far I now answer Issues 3, 5, 6 and 7 as follows:

Issue 3: I find that the works have been substantially completed in accordance with the contract, with some defects in respect of which the Council is entitled to a reduction in the amount recoverable on the contract.

# Issue 5: I find that the Contractor has -

(a) failed to maintain the specified mix for mortar and concrete in a proportion of the mortar and concrete

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- (b) failed in certain other comparatively minor details to comply strictly with specification e.g. hoop-iron re-inforcement; bitumen damp course; fixing of door-frames;
  - (c) failed to comply strictly with a number of other specifications as detailed earlier in this judgment but that in each of these cases the variations were either expressly directed by or else known to and accepted by the Architect or Clerk of Works acting for the Engineer.
- Issue 6: I find that the acceptance of work by the Engineer or Architect on his behalf with express knowledge of variations from the terms of the Specification and the issue of certificates in respect of such work amounts to a waiver by the Engineer as agent of the Council of any breach of contract that might be constituted by such variations.

## Issue 7: Does not arise.

It is convenient now to consider Issues 1, 2 and 4.

As I have already mentioned, the contract provided that interim certificates were to be issued in respect of 90% of the value of the work properly executed, and that when the work had been satisfactorily completed and taken over by the Council, the Contractor should be entitled to a certificate for 95% of the value of the work so executed. And that the remaining 5% should become payable on the expiration of the 6 months period of maintenance.

Clause 14 of the Specification provides that the "period of maintenance of any dwelling and/or 40 ablution blocks shall be six months after the date of completion of the block as certified by the City Engineer under Clause 7 of the General Conditions"; and Clause 7 of the General Conditions provides that when the works have been completely executed according to the provisions of the contract and to the satisfaction of the Engineer, the date of such completion shall be certified by him and such date shall be the date of commencement of the period of maintenance.

Certificates for payment for 95% of the value of the work were issued in respect of the ll blocks of buildings which were taken over by the Council, and letters of acceptance were issued in respect of these blocks giving the dates of acceptance in each case of the units accepted. It is clearly contemplated in Clause 14 of the Specification that there should be separate maintenance periods in respect of each block. So far as I am aware no certificate purporting in terms to be a certificate under Clause 7 of the General Conditions has been issued.

It was argued by Mr. Schermbrucker for the Council that the issue of a certificate of completion was a condition precedent to payment, and that payment of the 5% remaining could not become due till the certificate had been issued, and that the Contractor's claim was therefore premature. On the contract I accept that a certificate of completion is a condition precedent to the payment of the 5% balance of the contract price. However, Mr. O'Donovan for the Contractor has argued that the letters of acceptance written by the City Engineer must operate as certificates of completion and cause the maintenance period to commence; and this appears to have been the view taken by the City Engineer himself since, on 19th August, 1955, we find him writing to the Contractor in the following terms:-

"Some of your blocks are now due for maintenance repairs under the conditions of the contract. Do you wish to carry out this work as each block falls due, or to deal with the whole of the contract at a later date". (Exhibit 43).

The blocks could only be due for maintenance repairs if the maintenance period had commenced, and the letter certainly seems to indicate that the City Engineer was treating the letters of

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Judgment 6th September 1957 continued acceptance as certificates of completion. In the circumstances I think I must accept that the letters of acceptance were intended to and did operate as certificates of completion. I therefore find that the maintenance period in respect of each of the ll blocks accepted commenced on the date certified as the date of acceptance. So far as these blocks are concerned, therefore, the Contractor's claim is not premature.

A further point arose, namely, that Mr.Mould stated that as a result of the letter - Exhibit 10 43 - the Contractor intimated that "he'd like the maintenance period to be six months from the taking over of the last block". This is not quite the question that is asked in Exhibit 43, which is whether the Contractor would wish to carry out the maintenance work on the whole contract at once or on each block as it fell due - not whether the liability period of 6 months from completion should, in effect, be extended. In the absence of 20 the written reply to Exhibit 43 - which appears to have been lost, if it ever existed - I consider that whatever arrangement was reached in this matter - and Mr. O'Donovan for the Contractor accepts that an arrangement was arrived at - it must have been in terms of the letter, Exhibit 43 that is, that it was an agreement that the maintenance work on the contract as a whole should be carried out at the end of 6 months from the date of acceptance of the last block accepted, not that 30 there was an agreement to extend or vary the liability period.

As regards the six blocks which have not been accepted, certificates for payment of 90% of the work completed have been issued, but not the certificates for payment of 95%. As I have said, I accept that the issue of certificates is a condition precedent to payment, and here both the certificate for 95% and the certificate of completion (or letter of acceptance operating as a certificate of completion) are lacking. Mr. O'Donovan, for the Contractor, did argue, if I understood him correctly, that by virtue of Clause of the General Conditions acceptance by the Clerk of Works was equivalent to acceptance by the City Engineer, and that therefore the two notes (Exhibits 31 and 34) from the Clerk of Works

(Mr.Goodwin) stating that the blocks in question (Nos.30,37,38,38A,38B and 39) have been completed, repairs carried out and are ready for handing over, are binding on the Council. I cannot accept this argument as I do not consider that the Clerk of Works had any authority to accept the buildings, nor can the two notes possibly operate as certificates.

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Mr. O'Donovan, however, argues that the Contractor is entitled to payment in respect of these six blocks on the basis either -

(a) that if action was rightly taken by the Council under Clause 23 of the General Conditions, then cause of action arose by virtue of Clause 23 (iv)

or

(b) if action was wrongly taken by the Council under Clause 23, then such action constituted a breach of contract, on which the Contractor was entitled to sue

The position as regards these blocks appears to be as follows:-

When the blocks were stated by the Contractor to be complete they were inspected and lists of defects to be made good were supplied to the Contractor - v. Exhibits 32 and 33. The Contractor made good these defects to the satisfaction of the Clerk of Works (Mr.Goodwin) who so informed both the Architect and the Contractor - v. Exhibits 31 and 34, dated respectively 9th June, 1955, and 25th July, 1955. On 2nd August, the Contractor wrote to the City Engineer asking for a completion certificate (Exhibit 37). In reply he was informed by letter dated 4th August that a further inspection would be held on the following day, 5th August (Exhibit 38). The subsequent course of negotiations appears to have been largely verbal (v. Exhibit 46), but it appeared that the Engineer refused to accept the blocks principally on the basis that the mortar and concrete were unsatisfactory (v. Exhibit 48.) In the final paragraph of that

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letter (Exhibit 48) the Contractor was asked for a final answer by 19th October as to his willingness or otherwise to undertake the work necessary to put the contract in order. I cannot find any very satisfactory evidence as to what the Contractor was actually required to do. The correspondence does not give details, but Mr. Mould stated that after a discussion with the Mayor at the Town Hall there was a further visit to the site and the work required to be done was pointed out to the Contractor. He continued that there was partial agreement with the Contractor; that the Contractor was willing to do some of the work the Engineer required; that the general requirements were that the Contractor should rake out the defective mortar and replace it with mortar to specification standard; and that this related to all blocks 25 to 39. Bag-wiping and cracks in the floor screed were also apparently mentioned. The Contractor, who apparently had left the site prior to this, did not in fact carry out any further work, and after some further correspondence he was informed by letter dated 29th October, 1955, from the City Engineer that "In view of the fact that I have not received your decision I must inform you that it is my intention to take such action as may be necessary in accordance with the terms of the contract". Presumably this referred to action under Clause 23 of the General Conditions, as Mr. Mould stated that Clause 23 was invoked.

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Under Clause 9(i) of the General Conditions it is provided that "The Engineer shall at all times have power to order ...... the proper re-execution of any work executed with materials or workmanship not in accordance with Specification .....

Clause 9(iii) and 9(iv) read as follows -

"9 (iii) If the Contractor shall fail to carry out any such order, as by the preceding sub-clauses provided within such reasonable time as may be specified in the order, the materials or work so affected may, at the option of the Engineer, be made good by him in such manner as he may think fit, in which case the cost thereby incurred shall,

upon the written Certificate of the Engineer, be recoverable by the City Council as a liquidated demand in money.

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9 (iv) If any defect be such that, in the opinion of the Engineer, it shall be impracticable or inconvenient to remedy the same, he shall ascertain the diminution in the value of the works due to the existence of such defect and deduct the amount of such diminution from the sum remaining to be paid to the Contractor, or failing such remainder, it shall be recoverable as a liquidated demand in money".

Clauses 23(i) and 23(ii) read as follows -

23(i) In case at any time during the progress of the works :-

(a) Any unnecessary delay shall occur in the carrying out of the same through some default of the Contractor, or

- (b) the Contractor shall not carry out the said works to the satisfaction of the Engineer, or
- (c) the Contractor shall fail to comply with the directions given by the Engineer, or

(d) the Contractor shall at any time neglect or omit to pull down or remove any work or material which the Engineer shall have certified in writing to be defective or not according to the Contract then, and in any such case, the Engineer shall give written notice to the Contracter to proceed with the said works or to remedy such default or defect to the satisfaction of the Engineer.

(ii) If the Contractor shall -

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- (a) fail to comply with the instructions given in such written notice to the satisfaction of the Engineer, within six days after such notice shall have been given, or
- (b) assign or sub-let the Contract or any part thereof without permission in writing from the Engineer, or
- (c) become bankrupt or insolvent or shall compound with or make any assignment for the benefit of his creditors.

then, and in any such case, the Engineer shall be at liberty, without avoiding the Contract, to take the said Works wholly or partially out of the hands of the Contractor ....."

As I have found, defective mortar and concrete was to be found in the buildings, and as this was a latent defect, the Engineer accordingly, in my opinion, was entitled under Clause 9(i) to call upon the Contractor to re-execute the defective work in the blocks which had not been taken over, and in the event of failure to comply would apparently be entitled to take action under either Clause 9 or Clause 23 of the General Conditions.

From Mr. Mould's evidence no distinction appears to have been made between the blocks which had been accepted and those which had not. The Contractor's liability in respect of the blocks which had been taken over would, under Clause 9 (ii) of the General Conditions be limited to "any defect which may appear, either of material or workmanship, during the period of maintenance provided by the Contract". I will deal with this aspect of the matter later, but in view of the arrangement that the maintenance work should be done in respect of the whole contract at one time, the request to the Contractor to replace defective mortar in the accepted blocks forthwith would appear not to have been in order.

As regards the 6 blocks which were not accepted, Mr. Mould stated, as I have already mentioned, that Clause 23 of the General Conditions,

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was invoked. The Engineer, however, does not appear to have complied with Clause 23. The applicable provision of Clause 23 would appear to be paragraph (i) (d) which is set out above, and requires the defective work to be certified in writing by the Engineer. I cannot find that the Engineer or Architect at this time certified in writing that any particular work was defective. It appears to me that in default of such a written certificate specifying the work or material alleged to be defective, resort to Clause 23 of the General Conditions and taking over of the Works amounts to a breach of contract, giving rise to a cause of action, as argued by Mr. O'Donovan and I so hold.

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It follows that the action is not premature in respect of these 6 blocks, notwithstanding the absence of certificates.

The answer I find to Issue No.1 is accordingly in the negative.

As to the second Issue, this, as I understand it, only concerns the first two blocks taken over. By virtue of section 129 of the Municipalities Ordinance (Cap.136) a suit against the Council must be commenced within 6 months from the date when the cause of action arose. The cause of action in respect of a block which has been accepted would normally arise at the expiration of the 6 month maintenance period. In the case of the first two blocks accepted this was more than 6 months before the Contractor's suit was filed.

I have already dealt with the special arrangement made for the carrying out of work found to be necessary during the maintenance period, and have found that an agreement was reached that such work was to be carried out at the expiration of the maintenance period in respect of the last block accepted. Mr. O'Donovan argued, I think correctly, that in the circumstances the right to payment would not arise until the maintenance work was in fact done.

I therefore find that the answer to the second Issue is also in the negative.

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Judgment 6th September 1957 continued As regards the fourth Issue, the reference to a "final" certificate is misleading. The "final" certificate could be either the certificate for payment of 95% or the certificate of completion. As I have already said, both these are lacking in respect of the 6 blocks which the Council have not accepted, but I have found that there has been a breach of contract by the Council in respect of these six blocks, and that therefore the Contractor has a right of action in respect of them.

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The answer to this Issue in relation to the blocks which have not been accepted is accordingly in the affirmative.

I come now to the eighth Issue, namely whether the Council is entitled to any damages in respect of breaches of contract by the Contractor. On the findings I have made, the breaches of contract in respect of which damages could accrue to the Council are as follows -

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- (a) defective concrete in
  - (i) foundations;
  - (ii) floors;
  - (iii) walls;
- (b) defective mortar in
  - (i) foundations;
  - (ii) walls;
- (c) hoop-iron banding not in accord with specification;
- (d) damp-course proofing not in accord with specification;

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(e) defective door frames.

The rights of the Council in respect of these defects must, I think, be considered separately in relation to the ll blocks accepted and the 6 blocks which have not been accepted.

As regards the 11 blocks accepted by the Council, the responsibility of the Contractor under the contract documents appears to be limited

under Clause 9(ii) of the General Conditions which reads -

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"9(ii) Any defect which may appear, either of material or of workmanship, during the period of maintenance provided by the Contract, shall be made good by the Contractor at his own expense, as and when directed".

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It appears to me that certificates of completion (and I have held that letters of acceptance operate as certificates of completion) conclusive subject to Clause 9(ii). The provision in Clause 16 that certificates are not to be considered conclusive applies only to certificates for payments. As I have held also, a certificate of completion is a condition precedent to payment of the final amount due under the contract. The Arbitration Clause (Clause 26 of the General Conditions) excludes from arbittration matters "left to the decision or determination of the Engineer". Clause 7(1v) of the General Conditions requires the completion date to be certified "when the works have been completely executed according to the provisions of the contract and to the satisfaction of the Engineer".

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It could be argued that the works are not executed according to the provisions of the contract if there are defects, but I do not think this is the intended meaning of the clause. It is obviously contemplated in Clause 9(ii) that defects will appear after the date of completion has been certified. I think the construction to be put on Clause 7(iv) is that it means when the works - that is, by virtue of Clause 1(iv) of the General Conditions and Clause 14 of the Specification, when a block has been completed and defects remedied to the point when it is ready to be handed over; that is, when there has been substantial completion within the rule in <u>Dakin</u> vs. <u>Lee</u>. It would be otherwise if it were found that there had been no substantial completion or that the contract had been abandoned.

Once the maintenance period has commenced,

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Judgment 6th September 1957 continued the liability of the Contractor is limited by Clause 9(ii) to such defects as may appear within the six months maintenance period. This cannot include "defects" which were known to and accepted by the Engineer (or Architect on his behalf) during the course of construction. And I do not consider the Contractor is liable under the contract for defects which may be discovered after the maintenance period has expired (Marsden U.D.C. v. Sharp and Another, 47 T.L.R. 549).

The dates on which the different blocks were accepted were as follows -

Blocks 28 and 29 ... 18th December, 1954
Blocks 25 and 27 ... 28th March, 1955.
Block 26 ... 29th March; 1955.
Block 36 ... 16th April, 1955.
Blocks 31, 32, 33
and 34 ... 28th June, 1955.

On the basis that defects of mortar and other items were discovered at the inspection held in August, 1955 (Mr. Mould's evidence) the Contractor should be liable to make good the defects found in all but Blocks 28 and 29, or suffer diminution of the contract price (Clause 9(iii) and 9(iv) of the General Conditions).

It does not appear that defects of concrete or of mortar in the foundations were discovered within the maintenance period as Mr. Mould stated that it was not till March, 1956, that he had an idea of the defects concerning the foundations. As regards the mortar in the walls, again on Mr. Mould's evidence, it would appear that raking out and replacement of defective mortar was considered to be the appropriate remedy. However, unfortunately, I can find no evidence as to the extent of the defects, either as regards mortar or otherwise, discovered within the maintenance period on which I am able to assess a figure for defects. As the burden of proof is on the Council to establish its claim for damages for defects, although I am satisfied that the Contractor ought to suffer some diminution of his claim in respect of these ll blocks by reason of defects, and especially defects of mortar, discovered within the maintenance period, I am reluctantly obliged

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to find that the extent of the defects has not been established sufficiently to enable me to assess a figure for damages. I appreciate the difficulties of the Council in the matter, but without the necessary evidence I cannot make a finding as to the amount of damages.

As regards the six blocks which were not taken over. I think the position is somewhat easier. In regard to these blocks, there should, no doubt, have been a certificate by the Engineer under Clause 9(iii) or (iv) or Clause 23(iv) of the General Conditions. Nevertheless, I consider the Council is entitled to deduct from the contract monies such sum as it may be established represents the amount required to bring those blocks up to specification, or alternatively the diminution in value of the blocks, in so far as latent defects are concerned. It is difficult to make an assessment, since in general the evidence as to cost of repairs was not broken down to relate in particular to the six blocks or to the bad concrete and mortar. However, on the basis of Mr. Wevill's report I think I can attempt some assessment. I will take the items in the order set out in his report.

### I. Foundations.

This estimate appears to relate to bad concrete and mortar in the 17 blocks. I therefore propose to take 6/17ths of the sum assessed. If my arithmetic is correct, this results in a figure of shs.13,764 to the nearest shilling.

#### II. Floors.

This estimate does not relate solely to faulty concrete, and I find it impossible to reach any estimate as to the figure attributable to faulty concrete.

# III. Superstructure Walling.

Item (a) appears attributable to faulty mortar and I accordingly take a figure of 6/17ths of the sum assessed, which I make Shs. 6.564.

In the Supreme Court of Kenya

No.21

Judgment 6th September 1957 continued

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No.21

Judgment 6th September 1957 continued Item (b) includes refixing of door frames, but I am unable to separate the value attributable to this item from the rest of the item.

Item (c) - I do not think the whole of this item is properly allowable, but it is a very minor one in any case. I will allow 6/17ths of shs. 500/-, which I make shs. 174/-

The other items under the remaining Heads in Mr. Wevill's report are not, on the basis of my findings, recoverable. As regards repair work alleged to have been carried out by the Council, I have no proper evidence as to this nor anything to indicate how much of it was done on the 6 blocks in question. The figure should have been certified under either Clause 9 or Clause 23 of the General Conditions. In the absence of a certificate or satisfactory evidence, I cannot assess any figure in respect of this item.

Nor on the evidence before me do I feel able to allow anything in respect of loss of rent or excessive maintenance. The relevant evidence was given on the basis of the whole of the Council's case relating to alleged defects being established. I have not found the Council's case established in respect of the bulk of the alleged defects, and on the evidence I find it impossible to assess anything in respect of loss of rent or excessive maintenance attributable to the defects which I have found to be established.

As regards the Council's claim for cost of a detailed survey and report, it appears to me that part of this claim may properly be allowed in view of my findings. Assessment of an appropriate proportion is difficult, but I propose to allow a sum of shs. 2000/-.

In the result, therefore, I find that the answer to the eighth Issue is that the Council is entitled to shs.22,502 damages in respect of defective work.

I now come to Issues 9 and 10 which relate to the Contractor's claim for extras. The extras 10

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claimed were not set out in the Contractor's pleadings, but in view of the issues framed and the evidence given I propose to make a finding in respect of them. The details of the extras claimed appear in Exhibit 10. In general, as I have already found, I do not consider the Contractor is entitled to recover for extras not ordered in writing. I will, therefore, only deal with those either covered by written orders or which I consider constitute exceptions to the general rule:

In the Supreme Court of Kenya

No.21

Judgment 6th September 1957 continued

- (a) Items (i), (ii) and (iii) in Exhibit 10 which relate to depth of excavation as follows:-
  - (i) Stone masonry in foundation 16,969 sq.ft. @ shs.25,453/-
  - (ii) Extra excavation of
     black cotton soil.
     27,345 cubic feet @
     shs. -/20 per cubic ft. shs. 5,469/-
  - (iii) Extra filling under floor 27,345 cubic ft.
    @ shs.-/25 per cubic ft. shs. 6,836/-shs.37,758/-

The Specification (Clause 23) provided that the Contractor was to allow in his tender for the excavations and footings being carried down to a depth to allow four courses of stone work between top of foundation concrete to underside concrete floor slab, and that any greater or less depth of foundation work found to be necessary should form the subject of Variation Orders.

I consider that this provision constituted an obligation on the Engineer to issue Variation Orders if in fact the excavation was carried deeper than four courses; and, in fact, this appears to have been accepted as the position by the Engineer who, in the 5th paragraph of his letter of 22nd January 1955, to the

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No.21

Judgment 6th September 1957 continued

contractor, states:

"The Clerk of Works has been instructed to take measurements of the foundation depths and agree them with you. Variation orders will be issued as soon as this is done." This, in my opinion, is clearly an undertaking to pay for additional depth of excavations. I do not think that the figures in the claim relating to extra excavation are in dispute, and I am of the opinion that the contractor is entitled to recover for these items.

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- (b) Items (iv), (v) and (vi), as follows:-
  - (iv) Providing and fixing flashing to 2-flue stacks - 188 @ shs. 142/- each shs.26,696/-

(v) Providing and fixing flashing to 1-flue stacks - 32 @ shs. 120/- each

shs. 3.840/-

(vi) Providing and fixing flashing to 1-flue and stacks - 24 @ shs.75/- shs. 1,800/-

shs.32,336/-

These items are covered in variation orders 3739 and 3740 (Exhibits 18 and 19), and in my opinion the contractor is entitled to recover the sums claimed.

- (c) Item (x):-
  - (x) Murram path to Block 29 .....

shs. 366/-

It appeared that this murram path was constructed on instructions given by the Architect when the rooms in

these blocks were required for occupation by some missionaries. This work appears to be entirely outside the contract, and I consider the contractor is entitled to payment for it.

In the Supreme Court of Kenya

No.21

Judgment 6th September 1957 continued

- 10 (d) Item (xii):-
  - (xii) Children's latrines 3 @ 40/- each

shs. 120/-

This is covered by variation order 3741 (Exhibit 20) and the Contractor is entitled to payment.

- (e) Item (xvi) :-
  - (xvi) Extra for repairing wall damaged by lorry

shs. 270/-

This item again appears to be work outside the contract and I consider the contractor is entitled to recover.

The total of these extras in respect of which I consider the contractor's claim is justified is: shs. 70,850/-

In the result, I find the Contractor has established his claim to the extent of :-

- (a) shs. 140,018 in respect of the balance of the contract price;
- (b) shs. 50,000 in respect of the deposit for security;

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No.21

Judgment 6th September 1957 continued (c) shs. 70,850 in respect of extras

Against this I find that the Council is entitled to shs. 22,502 damages in respect of defective work.

I accordingly give judgment for the Plaintiff (i.e. the Contractor) in Suit No: 170 of 1956 in the sum of shs. 260,868/- and costs. In Suit No: 1314 of 1956 I give judgment for the Plaintiff (i.e. the Council) in the sum shs. 22,502/- with costs to be assessed as if the claim had been for the amount of the sum awarded.

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For the purpose of assessment of the costs of the hearing attributable to each suit, I direct that one eighth of the costs of the hearing shall be deemed to be attributable to Suit No: 1314/56.

DATED at NAIROBI the 6th day of September, 1957.

Sgd/- A. G. Forbes

# PUISNE JUDGE

Costs for two Counsel certified.

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By consent the fees allowed for qualified experts to be £10. 10. 0. per day.

Sgd/- A. G. Forbes, J. 6.9.57.

Stay of execution for 14 days granted. If notice of appeal filed within that time an application for any further stay will be considered on merits.

Sgd/- A. G. Forbes, J. 6.9.57.

No.22

### DECREE

In the Supreme Court of Kenya

No.22

Decree,

6th September 1957.

## IN HER MAJESTY'S SUPREME COURT OF KENYA AT NAIROBI

CIVIL CASES NOS. 170/56 & 1314/56.

ATA UL HAQ

versus NAIROBI CITY COUNCIL

and

NAIROBI CITY COUNCIL versus ATA UL HAQ

#### DECREE

## Before the Honourable Mr. Justice Forbes

These Suits having been consolidated and coming for hearing on the 4th, 5th, 8th, 9th days of April 1957, 1st, 2nd, 3rd, 6th, 7th days of May 1957, 1st, 2nd, 3rd, 4th, 5th, 8th, 9th and 10th days of July 1957, and for Judgment on the 6th day of September 1957, in the presence of Counsel for Plaintiff and Counsel for Defendant:

# IT IS ORDERED:

- (1) That the Defendant, City Council of Naircbi, do pay to the Plaintiff, Ata Ul Haq, inCivil Case No. 170 of 1956, the sum of Shillings. 260,868/- together with taxed costs of the said Civil Suit;
- (2) That the Defendant, Ata Ul Haq, do pay to the Plaintiff, City Council of Nairobi, in Civil Case No. 1314 of 1956, the sum of Shillings. 22,502/- together with taxed costs on that amount, and
- (3) For the purpose of assessment of costs of the hearing attributable to each Suit, that one-eighth of the costs of hearing shall be deemed to be attributable to Suit No.1314 of 1956.

GIVEN under my hand and the Seal of the Court at Nairobi, this 6th day of September, 1957.

ISSUED the 14th day of November, 1957.

(Sgd) J. CHAMBERS

SEAL.

DEPUTY REGISTRAR. SUPREME COURT OF KENYA.

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#### No.23

## PROCEEDINGS, STAY OF EXECUTION

No.23

Proceedings, Stay of Execution,

2nd, 9th, 16th and 24th October 1957.

2.10.57

Cockar.

Bristow.

By Consent stand-over 9.10.57.

G.B. Rudd.

## 9.10.57

Mackie Robertson for Applicant.

Cockar for Respondent.

Mackie-Robertson: Applies for stay of execution pending appeal.

Affidavit of Riseborough. Trial Judge gave stay of 14 days and said that if appeal filed application for further stay could be made. Affidavit in reply in which Respondent says he has property worth Shs.525,000/-. Not alleging Abdul Haq insolvent. His property not quickly realisable. If need be money will be brought into Court. Would offer interest at 8% from date of filing if appeal successful.

Cockar asks for adjournment to 16.10.57 to take instructions on that offer.

G.B. Rudd.

#### 16.10.57

Mackie-Robertson.

Cockar.

By consent stand-over 24.10.57 - no adjournment fees.

G. B. Rudd.

#### 24.10.57

Mackie-Robertson.

Cockar.

Order by consent. Stay of execution pending appeal on terms that (1) interest on the Principal Amount decreed shall be at 8% until date of payment and it must be date of institution of suit of course.

(2) The nett costs to be paid on taxation. Costs of application to Decree holder.

24th October, 1957.

G.B. Rudd, J.

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No.24

## MEMORANDUM OF APPEAL

In the Court of Appeal for Eastern Africa

IN HER MAJESTY'S COURT OF APPEAL FOR EASTERN AFRICA AT NAIROBI

No.24

CIVIL APPEAL NO. 83 OF 1957

Memorandum of Appeal,

CITY COUNCIL OF NAIROBI

16th November 1957.

versus

ATA UL HAQ

RESPONDENT

APPELLANT

(Appeal from a Judgment and Decree of the Supreme Court of Kenya at Nairobi (Mr. Justice Forbes) dated the 6th day of September, 1957,

> Civil Case No.170 of 1956, between

Ata Ul Haq

Plaintiff

and

City Council of Nairobi

Defendant

and

Civil Case No.1314 of 1956,

between

City Council of Nairobi

Plaintiff

and

Ata Ul Haq

Defendant

(Consolidated)

## MEMORANDUM OF APPEAL

City Council of Nairobi, the Appellant abovenamed, appeals to Her Majesty's Court of Appeal for Eastern Africa against the whole of the decision above-mentioned on the following grounds, namely :-

### GROUNDS OF APPEAL

The learned Judge erred in finding as he did in the result of his deliberations concerning the 11 blocks handed over that the Respondent could omit work included in the Contract or do work of

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In the Court of Appeal for Eastern Africa

No.24

Memorandum of Appeal,

16th November
1957 continued.

less quality than that specified in the Contract and yet recover the full Contract price; and in failing to make adequate diminution of the Contract price for any departure from the Specification or an award of damages for breach of Contract.

2. The learned Judge erred in failing to recognise that an agreement on the part of the Appellant Council to accept a lower standard of work at the same price could only be inferred if at all in the most exceptional circumstances which did not exist here, nor was there any consideration for such an agreement.

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- 3. The learned Judge erred in finding that the Appellant could not claim damages in respect of defects of which the Architect and Clerk of Works were aware.
- 4. The learned Judge erred in equating the Engineer with the Appellant for all purposes and in failing to find that although the Engineer was the agent of the Appellant for many purposes, he was not acting as such agent in expressing satisfaction or dis-satisfaction with the work.
- 5. The learned Judge erred in finding that because the Architect, who was authorised to represent the Engineer in practice, gave oral directions (which he was not authorised to do) the Council held the Engineer out as an agent having authority to waive the contractual requirement that variations should be ordered in writing and that the acceptance of work by the Engineer with knowledge of variations from specification amounted to a waiver by the Appellant.
- 6. Whatever the position of the Engineer, the learned Judge erred in failing to distinguish this case from that of Bateman v. Thompson quoted by him, and in failing to find that the Contract in this Case (Clause 2 of the General Conditions) required the work to be done in a good and workman-like manner and (Clause 3 of the General Conditions) that the works should be executed under the direction of and to the entire satisfaction of the Engineer, and that the latter provision amounted to a superadded protection to the Appellant.
- 7. The learned Judge erred in failing to find that even if the Engineer expressed his satisfaction with part of the works and the Appellant

occupied that part, the right to sue for breach of Clause 2 of the Contract remained with the Appellant in respect of the whole of the works.

- 8. Even if the Engineer had power to sanction departures from specification otherwise than in writing (which is denied) the learned Judge erred in failing to adjust the Contract sum to take account of such variations.
- 9. The learned Judge erred in finding that there could be no claim for defects discovered after the 6 months maintenance period in any of the 11 blocks handed over, and in finding that the completion certificate issued under Clause 7 of the Contract was conclusive subject to Clause 9(ii) and in failing to find that such certificate was a certificate for payment and as such not conclusive by virtue of paragraph 16 of the Specification, and in wrongly applying the decision in Marsden U.D.C. v. Sharp.
- 20 10. Having found that there was defective work and that some pecuniary loss was suffered by the Appellant, the learned Judge erred in failing to award damages to the Appellant.

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- ll. The learned Judge erred in holding that the Appellant was in breach of contract in acting under Clause 23 of the General Conditions and in failing to hold that the Council was justified in acting under the said Clause and that no special formality was required and further, if the learned Judge was right in holding that the Appellant was in breach of Contract in acting under Clause 23, he erred in awarding the balance of the whole Contract sum without regard to the cost of the work which the Respondent had not done.
- 12. Having held that a certificate of completion was a condition precedent to final payment, the learned Judge erred in holding that the Respondent was entitled to full payment on the last six blocks in the absence of such certificates.
- 13. The learned Judge erred in his application of the principle of Dakin v. Lee in failing to find that the express provisions of the Contract with regard to release of retention money excluded the application of that principle and in failing to find that the Respondent was not in any event

In the Court of Appeal for Eastern Africa

No.24
Memorandum of Appeal,
16th November 1957 - continued.

In the Court of Appeal for Eastern Africa

No.24

Memorandum of Appeal,

16th November 1957 -- continued.

entitled to the last five per centum of the Contract price for any of the blocks or to a refund of the deposit, particularly as he had clearly found that the works had not been completed to Contract.

14. For reasons to be urged under Ground of Appeal No.3 above, the learned Judge erred in failing to allow to the Appellant damages or diminution of the Contract price in respect of all the defects found by him as fact whether in the ll blocks completed or in the 6 blocks uncompleted.

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- 15. The learned Judge erred in finding that the Appellant was only entitled to damages in respect of defects discovered within the maintenance period and in not allowing any damages or diminution of the Contract price in respect of the defective concrete mortar and other defects found as fact by the learned Judge in the ll blocks which had been taken over.
- 16. The learned Judge erred in failing to award damages to the Appellant for loss of rent and for excessive maintenance that would be incurred by reason of Respondent's failure to complete the works to specification.
- 17. The learned Judge erred in failing to allow the Appellant's full claim for cost of a detailed survey and report.
- 18. The learned Judge erred in allowing the Respondent's claim for Shs. 6,836/- in respect of extra filling under floors when the evidence showed that such filling was not in accordance with the Specifications and neither the Architect nor Clerk of Works acceptance thereof was binding on the Appellant Council.
- 19. The learned Judge erred in failing to find that the works had not been completed by the Respondent in accordance with the Contract or even substantially so completed within the meaning of Dakin v. Lee and that the Respondent was not entitled to any part of his claims.

WHEREFORE the Appellant prays that the Judgment in the Court below be set aside and amended or otherwise dealt with as to this Honourable Court may seem fit and that the Appellant be

awarded the costs of this Appeal and the costs or such revised portion of the costs in the Court below as to this Honourable Court may seem fit.

In the Court of Appeal for Eastern Africa

DATED AT NAIROBI, this 16th day of November, 1957.

No.24

(Sgd) KAPLAN & STRATTON

Memorandum of Appeal,

# ADVOCATES FOR THE APPELLANT.

16th November 1957 continued.

To:

The Honourable the Judges of Her Majesty's Court of Appeal for Eastern Africa,

10 and

> Messrs. Cockar & Cockar, Advocates for the Respondent, Regal Mansions, Northey Street, Nairobi.

> > No. 25

No. 25

# JUDGMENT

Judgment,

IN HER MAJESTY'S COURT OF APPEAL FOR EASTERN AFRICA AT NAIROBI.

10th December 1958.

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CIVIL APPEAL NO. 83 OF 1957

BETWEEN

CITY COUNCIL OF NAIROBI

APPELLANT

and

DAH JU ATA

RESPONDENT

(Appeal from a judgment and Decree of the Supreme Court of Kenya at Nairobi (Mr. Justice Forbes) dated the 6th day of September, 1957, in

Civil Case No.170 of 1956.

Between

30 Ata Ul Haq Plaintiff

and

City Council of Nairobi

Defendant

Civil Case No.1314 of 1956.

Between

City Council of Nairobi

Plaintiff

and

Ata Ul Haq

Defendant).

# JUDGMENT

O'CONNOR P. 40

This is an appeal from a decision of the

In the Court of Appeal for Eastern Africa

No.25
Judgment,
10th December
1958 continued.

Supreme Court of Kenya in two consolidated suits arising out of a contract to build seventeen blocks of African housing in the Ofafa Estate, Nairobi. The contract, which is dated the 29th June, 1954, was made between Ata Ul Haq (therein and hereinafter called the Contractor) of the one part and the City Council of Nairobi (therein and hereinafter called the Council) of the other part

Eleven out of the seveteen blocks were accepted and taken over by the Council, the contractor being paid 95% of the contract price. The Council refused to take over the remaining six blocks on the ground that the Contractor had been guilty of breaches of contract in respect of all seventeen blocks and that the building was far short of the standard required by the specification which formed part of the building contract. When this decision was made by the Council, the Contractor had been paid 90% of the contract sum in respect of the six blocks not taken over. The Contractor denied the breaches of contract alleged and took no steps to remedy them.

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On the 18th February, 1956, he issued a plaint against the Council in Civil Case No. 170 of 1956 in which be claimed that he had duly completed the work in accordance with the contract and had supplied extras and done additional work and claimed:

- (i) Shs.140,018/- in respect of balance of contract price including retention monies;
- (ii) Shs.50,000/- in respect of a deposit which he had made by way of security;
- (iii) Enquiries into the value of the extra work carried out by him and payment of the amount shown to be due.

He also claimed costs, interest and other relief.

On the 28th May, 1956, the Council filed a 40 defence to this suit in which they denied liability and said that the works had not been completed in accordance with the contract and that they were justified in not taking over the six blocks; and they claimed to be entitled to make deductions for defects. They further pleaded that the Contractor's suit was premature as a final certificate

had not been issued and, alternatively, that it was barred by limitation under section 129 of the Municipalities Ordinance (Cap.136).

On the 14th November, 1956, the Council filed a plaint in Civil Case No. 1314 of 1956 in which they alleged inter alia that the Contractor had failed to execute the works in accordance with the contract in various respects of which they gave particulars. They said that these were latent defects of which they had not known when the payment certificates had been issued to the Contractor, and they claimed special damages amounting to Shs. 826,849/- being the estimated cost of remedying the defects and for loss of rent of the buildings and supervision charges while the work was being The Council also claimed Shs. 9,881/- in respect of the fee paid to a Mr. Wevill, a quantity surveyor, for a detailed survey and report on the works, and damages amounting to Shs. 46, 220/in respect of the unusual maintenance costs which would be necessitated by the poor quality of the together with interest, costs and buildings; further or other relief.

On the 31st January, 1957, the Contractor filed a Defence in Suit 1314/56 in which he averred inter alia that he had duly completed the contract, that the Council had accepted all the works (including the six blocks), had gone into possession and let them and had continued to collect rents for them. He denied that there were any latent or other defects and pleaded, in the alternative, that if there were any such defects, the Council, with full knowledge of them, had waived any claim in respect thereof. He said that the Council by its servants or agents had inspected the works from time to time, had required the Contractor to carry out repairs or alterations as the Council considered necessary and that he (the Contractor) had duly completed such repairs and alterations, that the Council by its servants or agents had approved all the works and taken possession, and that the Council by its City Engineer had issued interim payment certificates amounting to Shs. 1,612,540. The Contractor also pleaded that the Council was estopped from denying that the works had been carried out in accordance with the contract, having induced the Contractor to think that the works were approved and having failed to object during the progress of the works when any alterations or repairs could more easily have been

In the Court of Appeal for Eastern Africa

No.25
Judgment,
10th December
1958 continued.

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No.25

Judgment, 10th December 1958 continued. remedied. The Contractor alleged that the Council by refusing to pay the balance due were in breach of their contract. He denied any breaches by him and prayed that the Council's suit be dismissed.

These two suits were consolidated and tried together.

Before the hearing the ten issues which arose on the pleadings (apart from an issue as to costs) were agreed by Counsel, as follows:

- 1. Is the Contractor's claim premature?
- 2. In the alternative is it barred by limitation wholly or partially?
- 3. Have the works been completed by the Contractor in accordance with the contract?
- 4. If so, is the Contractor entitled to the sum claimed, or any part thereof in the absence of the final certificate?
- 5. If the answer to No.3 is in the negative in what respects has the Contractor failed to perform the Contract?
- 6. Has the Council waived any breach of contract by the Contractor wholly or partially?
- 7. Is the Council estopped from alleging such breaches or any of them?
- 8. If the Council is entitled to any damages in respect of such breaches how much?
- 9. Has the Contractor carried out the extra work as alleged in the Plaint?
- 10. If so, to what sum is the Contractor entitled in respect thereof?

A considerable amount of evidence was called on each side and the trial lasted for about seventeen days.

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On the 6th September, 1957, the learned trial Judge delivered judgment. He negatived a plea (which had been introduced by an amendment) that the Contractor had been guilty of fraudulent misrepresentation of the quality of the work. He found that the Contractor had established his claim to the extent of:

(a) Shs. 140,018/- in respect of the balance of the contract price.

- (b) Shs. 50,000/- in respect of the deposit for security.
- (c) Shs. 70,850/- in respect of extras.

Against this he found that the Council was entitled to Shs. 22,502/- for damages in respect of defective work. He accordingly gave judgment for the Contractor in suit No.170 of 1956 in the sum of Shs.260,368/- and costs. In suit No.1314 of 1956 he gave judgment for the Council in the sum of Shs.22,502/- with costs to be assessed as if the claim had been for the amount of the sum awarded; and he directed that one eighth of the costs of the hearing should be deemed to be attributable to suit No.1314/56. A Decree was signed on the 6th September, 1957. It is against this judgment and decree that the present appeal is brought.

It will be necessary now to set out the facts a little more fully. The facts as found by the learned Judge are not seriously questioned on the appeal, though the inferences which he drew from them are challenged.

I take the following extracts from the judgment of the learned Judge:

"In or about the year 1954 the Council undertook the development of an African Housing Estate at Ofafa. The projected estate was divided into sections for construction purposes, the particular section with which this case is concerned being known as "Part B". Part B comprised 17 blocks of dwellings and ablution units with minor ancillary works. Tenders were invited for the construction of Part B, that submitted by the Contractor was

In the Court of Appeal for Eastern Africa

No.25

Judgment, 10th December 1958 continued.

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No.25

Judgment, 10th December 1958 continued. accepted, and a contract for the carrying out of the work was duly entered into between the Contractor and the Council on 29th June, 1954. The contract itself is a fairly brief document of four clauses, but it incorporated in the Contract the General Conditions of Contract of the Council, the Tender of the Contractor, the Specification prepared by the Council's Engineer, a Schedule of Rates, and the Contract Drawings."

"In practice, day to day supervision of the execution of the contract works was carried out by an African Housing Architect and a Clerk of Works, both of whom were employed by the Council. Initially, the Architect was a Mr. Tanner and the Clerk of Works was a Mr. Stone. Mr. Tarmer was succeeded as Architect by a Mr. Mould who took over in June, 1955. Mr. Mould had been associated with the work since March, 1955, under Mr. Tanner, and it appeared that the works were about 80% complete when Mr. Mould came on to the scene. Mr. Stone was succeeded as Clerk of Works by a Mr. Goodwin in about May, 1955.

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In pursuance of the contract the Contractor entered upon the site and commenced work in June, 1954. Work proceeded, and in due course, eleven of the seventeen blocks provided for in the contract were completed, accepted in writing, and taken over by the Council. Payments were made to the Contractor on certificates issued by the City Engineer under Clause 15 of the Specification up to a total of Shs.1, Oll, 104/- being 95% of the certified value of the work in respect of these blocks.

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Of the remaining six blocks, four were completed and ready for inspection and the other two were complete except for minor details, when differences arose between the Contractor and the Council. Interim payments made to the contractor in respect of these six blocks amounted to Shs. 493, 398/- being 90% of the certified value of the work done.

These blocks were never formally accepted, but were in fact occupied by the Council after the Contractor had withdrawn from the site."

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"Taking the evidence of Mr. Stone and Mr. Mould together, a very clear general picture emerges. I do not think it is disputed that the Council were seeking to erect cheaply priced buildings in this Housing Estate, and that this contract did envisage a low, or shall I say, economical standard of This, of course, is no excuse for an even lower standard than is called for by the specification. There is, however, some latitude for interpretation of the specification, and it is perfectly clear that during his term of office as Architect in charge of the contract, Mr. Tanner deliberately allowed a low standard of work within the specification, in a number of instances below specification, while Mr. Mould on arrival, no doubt performing the function of a new broom, did his best to insist on compliance with a far higher standard. The position is really summed up by Mr. Mould's admission in cross-examination when he agreed that a different standard is being applied now, when he wholeheartedly condemns all the blocks or buildings, from that applied when acceptance of certain of the blocks was recommended to I accept Mr. Mould's evidence the Council. that when he drafted letters of acceptance in respect of five of the blocks he was not fully aware of the general character of the buildings. He had, of course, not seen the major part of the work being carried out; and I have no doubt that he was sincerely shocked when he did discover the standard to which the building had been carried out and considered it was a scandalously low I do not accept, however, that the standard. Council, through its officers, had no knowledge of the standard to which the works were being built. It is clear from Mr. Stone's evidence that Mr. Tanner was in general fully aware of the standard of the work that was being done and accepted it,

In the Court of Appeal for Eastern Africa

No.25
Judgment,
10th December
1958 continued.

No.25

Judgment, 10th December 1958 continued. and there is some evidence that this knowledge and acceptance was shared by more senior officers of the Council. Mr. Mould stated that he did not recommend acceptance of the five blocks of buildings without protest but that he was overruled. He said that he indicated his objections to Mr. Roberts, then City Engineer, and that later, when Mr. Saunders was Acting City Engineer, he explained his grounds of objection to Mr. Saunders in detail. Mr. Mould said that Mr. Saunders put it to him often that he (Saunders) would have to put it to the Council and Mr. Mould also said that there were many meetings between Heads of Departments. Mr. Mould was not present and was unable to say what was put to the Council or what was discussed at the meetings of Heads of Departments, and other evidence does indicate that Mr. Mould's superior officer, and possibly the Council itself, was at one time prepared to accept a lower standard of work than he was.

However this may be, I am satisfied that, with certain exceptions to which I will refer later, Mr. Tanner, and Mr. Stone on Mr. Tanner's authority, allowed a low standard of work; and that in many cases work was authorised or knowingly accepted which was not strictly in accordance with specification. I am also satisfied that on occasion Mr. Tanner directed work to be done which was additional to specification. It seems equally clear that notwithstanding the provisions of the contract documents, to which I will refer in detail presently, practically the whole of the dealings between Mr. Tanner (and later Mr. Mould) and the Contractor were on a verbal basis and that the Contractor accepted and gave effect to verbal directions given him by Mr. Tanner. Written variation orders for additional work in accordance with the contract appear to have been issued in only three cases, that is, Exhibits 18, 19 and 20."

The answers to the questions raised in the appeal turn largely upon the construction to be put on certain provisions of the contract documents, a matter upon which an appellate court is

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in as good a position to pronounce as is the trial Judge: Powell v. Streatham Manor Nursing Home (1935) A.C. 243, 267. It will be desirable now to set out and to consider the relevant provisions of the contract documents. The contract documents are:

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- (i) The Deed of Contract (already mentioned) dated 29th June 1954 and made between the Contractor of the one part and the Council of the other part (referred to hereinafter as 'the Deed'). This recites that the Contractor has tendered and the Council has agreed with the Contractor for the execution of the work in accordance with -
- (iii) Tender of the Contractor;
  - (iv) Specification prepared by the Engineer;
    - (v) Schedule of Rates;
  - (vi) Numbered Contract Drawings.

Documents (ii) to (vi) above are referred to in the Deed and hereinafter as "the attached documents".

I do not think that it is necessary to set out the Deed in full, but the following provisions of it must be particularly noted.

(a) By clause 1, in consideration of the Works thereinafter mentioned, the Council undertakes to pay to the Contractor £85,476 subject to the provisions of Clause 2 at the times and by the instalments and subject to the provisions for retention monies mentioned in the attached documents. The contract price includes Shs.50,000 for contingencies. "The Engineer" is interpreted for purposes of the Deed as "the City Engineer for the time being of the Council." His representative and the deputy of his representative are not included in this definition.

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Judgment, 10th December 1958 continued. (b) By clause 2, in case the City Engineer thinks proper at any time during the progress of the works to make any alteration in or additions to or omissions from the works or any alteration in the kind or quality of the materials to be used therein, and shall give notice thereof in writing to the Contractor, the Contractor is to comply with the notice "but the Contractor shall not do any work extrato or make any alteration or addition to or omission from the Works or any deviation from any of the provisions of this Contract without the previous consent in writing of the Engineer ...."

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- (c) By clause 3 the Contractor is to observe and perform all the stipulations mentioned in the attached documents and all references to the Works are also where the context permits it to include materials or goods. It is not clear whether this interpretation of "Works" is to apply to the attached documents only or also to the Deed itself. There is a definition of "Works" in General Condition 1 (iv) which includes "materials" and is expressed to apply to "all contract documents".
- (d) By Clause 4, the attached documents and conditions there set out are "except where the same are varied by or inconsistent with these presents" to form and be deemed to be part of the Contract as if the same were repeated therein categorically and the Contractor is to observe and perform the conditions set out in the attached documents.

The "provisions for retention monies" noted under (a) above are contained in paragraph 15 of Part I of the Specification set out below.

The provision noted in paragraph (b) above is important. The effect of it is twofold, that is to say it is (i) a provision for the benefit of the Contractor to the extent that he cannot be required to do extras or vary the works contracted for, or to alter the kind or quality of the specified materials without a written notice from the City Engineer; and (ii) a stipulation for the benefit of the Council that the Contractor shall not do extras or make alterations or additions to or omissions from the works "or any deviation

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himself.

from any of the provisions of this Contract" without the previous consent in writing of the City Engineer. The object is clear. On the one hand, the Contractor will have written variation orders upon which he can either claim additional payment or justify omissions. On the other hand, the Council will not be bound to accept alterations or additions to, or omissions from, the works or "any deviation from any of the provisions of the Contract" unless the City Engineer has consented to them in writing. The first part of the clause specifically refers to "alteration in kind or quality of the materials". The second part contains no express reference to alterations to materials. It may be that the interpretation of "Works" in Clause 3 would cover materials. But if not, I am of opinion that, since extras, alterations and additions to, and omissions from the Works are already expressly provided for in this sentence, the expression "or any deviation from the provisions of the contract" must have been intended to refer to alterations in the kind or quality of the materials to be used in the contract. This construction would give effect to all the words of the sentence, and would make the obligation of the Contractor not to depart from the terms of the contract without the written consent of the Engineer commensurate with the power of the Engineer to direct such departures. to be the plain and sensible construction. Accordingly, though "deviation" in a building contract commonly means a divergence from the plan or drawings, I think that in this clause the expression "any deviation from any of the provisions of this contract" would include a divergence from the requirements of the contract documents relating to the materials to be used. For instance, General Condition No. 2(i) mentioned below is to the effect that the Contractor shall execute and perform the works in a good and workmanlike manner and with the best materials and workmanship in accordance with the Specification, and the Specification provides, for example, for foundation concrete to be of a certain mix and for first quality local stone to be used. concrete of a substantially weaker mix or inferior quality stone were used, that would, in my opinion, be a deviation from a provision of the Contract within the prohibition in Clause 2 and would require the authorisation in writing of the City Engineer

The word "deviation" can be used to denote

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Judgment, 10th December 1958 continued. a departure from the specified materials. For example, in Ellis v. Hamlen 128 E.R. 21, failure to put into a building joists of specified materials and dimensions was described as a "deviation" from the contract; and the learned editor of Hudson on Building Contracts 7th Edn. at page 180 refers to Whitaker v. Dunn (1886) 3 T.L.R. 620 (which was a case relating to the use of inferior concrete) as a case of a builder who "deviates" from a specification. I think that General Condition No. 17 (noticed below) which mentions "deviations" from the specification as including "materials" ordered not to be used supports the construction which I have put upon the word "deviation" in this contract.

The effect of the provision of the Deed noted under paragraph (d) above is that in case of inconsistency between any provision of the Deed and of any of the attached documents, the provision of the Deed is to prevail: in fact the provision of the attached documents is not deemed part of the contract to the extent of such inconsistency.

The following General Conditions are relevant: Condition No.1 reads:

"Definition of Terms

1(i) ENGINEER. The term "Engineer" whereever used hereinafter and in all contract documents shall be deemed to imply the City Engineer or such person or persons as may be duly authorised to represent him on behalf of the City Council of Nairobi or the successors in office of such person or persons and also such person or persons as may be deputed by such representative to act on his behalf for the purpose of this particular contract: During the continuance of this contract, any person acting for the Engineer, or exercising his authority, or any successor in office of such Engineer, shall not disregard or overrule any decision, approval or direction given to the Contractor, in writing, by his predecessor, unless he is satisfied that such action will cause no pecuniary loss to the Contractor or unless such action be ordered as a variation to be adjusted as hereinafter provided.

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(ii) APPROVED AND DIRECTED. The terms 'Approved' and 'Directed' wherever used hereinafter and in all contract documents shall mean the approval and direction in writing, of the Engineer.

(iv) WORKS. The term 'Works' wherever used hereinafter and in all contract documents shall mean all or any portion of the work, materials and articles .... which are to be used in the execution of this Contract .... "

It will be observed that there is inconsist-

ency between the interpretation of the expression

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"the Engineer" in Clause 1 of the Deed and this definition of "Engineer", in that, while this definition would include in the term "Engineer" not only the City Engineer for the time being, but such person or persons as may be duly authorised to represent him on behalf of the City Council of Nairobi and their successors in office and also such person or persons as may be deputed by such representative to act on his behalf for the purpose of this particular contract, the expression "the Engineer" is in the Deed confined to "the City Engineer for the time being of the Council". The General Conditions are, as their name implies, general, and apply only to any contract of the Council to or in which they are applied or incorporated by express provision in the contract deed. It would be open to the parties to apply the General Conditions in whole or in part and with or without modification as expressed in the contract deed. It is also open to them to provide that the General Conditions shall only apply to the extent that they are not inconsistent with the contract deed. That is what has been done here. The question now arises: to what extent is the definition of "Engineer" contained in General Condition 1(i) inconsistent with the interpretation of "the Engineer" in Clause 1 of the Deed? The interpretation in the Deed - "(herein referred to as the Engineer)" prima facie refers only to the Deed; but Clause 4 of the Deed provides that the attached documents

(which include General Condition 1) shall except where the same are varied by or are inconsistent with these presents form and be deemed to be part of the Contract "as if the same were repeated

It is arguable that

herein categorically".

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Condition 1(i) is thus imported into the Deed and that that part of it which extends the meaning of the term "Engineer" to include the representative of the Engineer and the deputy of such representative must be discarded throughout the Contract documents as being inconsistent with the meaning ascribed to "the Engineer" by the Deed. possible, however, effect must be given to every part of a written contract and it must, therefore, be considered whether there is any way of recon-10 ciling these two interpretations. It may be that it would be possible to apply the extended definition of "Engineer" contained in Condition No.1(i) to matters not expressly provided for in the Deed itself where its application would not produce inconsistency with the provisions of the Deed; but, however that may be, it is clear that in any express provision of the Deed itself, the expression "the Engineer" must be given the meaning assigned to it by the Deed, namely "the City 20 Engineer for the time being of the Council" and not the extended meaning provided by Condition 1(i) of the General Conditions. The matter is important because, as already noted, there is a provision in Clause 2 of the Deed which expressly enjoins that the Contractors shall not "make any deviation from any provisions of this Contract without the previous consent in writing of the Engineer". That means, by the interpretation in the Deed itself, the previous consent in writing of the 30 City Engineer for the time being of the Council, and does not include the consent, either oral, or in writing, of his representative or his representative's deputy.

It will be noted that "approved" and "directed are both interpreted to require writing by the Engineer. If the General Conditions stood alone, direction or approval in writing by the City Engineer's representative or deputy would be enough in all cases, but (as already pointed out) 40 that extension of meaning is negatived by the express provision of the Deed in certain matters including deviations from the provisions of the contract.

Condition 2(i) of the General Conditions is as follows:

"2(i). The Contractor shall at his own risk and cost execute and perform the Works

described in the Contract Agreement and detailed in the Specification and Drawings provided and supplied to the Contractor for the purpose of the Works and completely finish the said Works in a good and workman-like manner with the best materials and workmanship and with the utmost expedition, in accordance with the said Contract Agreement, Specification and Drawings, which shall have been signed by the Contractor and the Engineer, and in accordance with such further drawings, details, instructions, directions and explanations as may from time to time be given by the Engineer."

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It will be noted that there is here a specific requirement (incorporated in the Contract by Clause 3 of the Deed) that the Contractor will execute and perform the works "in a good and workmanlike manner with the best materials and workmanship." There is also a provision for further drawings, instructions, etc. to be given by the Engineer. Construing this latter provision with Clause 2 of the Deed and General Condition 1(i), the result seems to be that the Engineer or his representative or the deputy of his representative could give written or oral details, instructions and explanations, or written directions, or drawings, as to what was required under the Contract, and, perhaps, as to matters upon which the Contract is silent; but that if alterations in, or additions to, or omissions from the specified Works or alterations in the kind or quality of the specified materials, or other deviations from any of the provisions of the Contract were desired by either side, a written notice or written consent as the case might be, from the City Engineer himself would be requisite. Put more shortly, I think the effect is that the City Engineer's representative or representative's deputy could illustrate, explain, instruct or direct (writing being required for a "direction"), within the limits of the contract documents (and, no doubt, there is some room for flexibility here) and where the contract documents are silent; but that if alteration, variation or deviation from the contract were desired, the written direction or written consent of the City Engineer himself would be necessary. There is nothing unreasonable in such a provision. reasons for it are plain. The benefit for the Contractor has already been pointed out.

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other hand, the Council thereby give notice that they do not bind themselves to accept departures from the contract requirements which may be orally consented to by some complacent representative of the City Engineer or the deputy of such representative, or, indeed, by the City Engineer himself otherwise than in writing. So far as the representatives of the Engineer are concerned, this is a proper precaution on the part of a body charged with the disposal of public funds. As regards 1.0 the City Engineer himself, it is obvious that where the duration of contracts extends over months or years, if the City Engineer is absent on leave or has been replaced, the question of whether he has or has not consented can be readily and cheaply established only if written consents are But it is unnecessary to speculate as required. to the object of the provisions and whether they are reasonable or unreasonable. My duty is to construe the contract and the material point is 20 that the authority of the Architect (and indeed, of the City Engineer) is limited and does not include power to approve orally departures from the Specification. A fortiori for the Clerk of Works.

Condition 3, so far as relevant, reads as follows:

> "The said Works shall be executed under the direction and to the entire satisfaction in all respects of the Engineer, who shall at all times have access to the Works .... "

The effect of this will be referred to later.

Condition 7(iv) reads:

"When the Works have been completely executed according to the provisions of the Contract and to the satisfaction of the Engineer, the date of such completion shall be certified by him, and such date shall be the date of commencement of such period of maintenance as may be provided by the Contract."

Condition 9(i) reads:

"All materials and workmanship shall

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be the best of their respective kinds and shall be provided by the Contractor, except as may be otherwise particularly provided by the Specification or directed by the Engineer, and the Contractor shall, upon the request of the Engineer, furnish him with proof that the materials are such as are specified. The Engineer shall at all times have power to order the removal of any materials brought on the site which, in his opinion, are not in accordance with the specification or with his instructions, the substitution of proper materials and the removal and the proper re-execution of any work executed with materials or workmanship not in accordance with the Specification and Drawings or instructions, and the Contractor shall forthwith carry out such order at his own cost."

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Again there is a stipulation that the best materials and workmanship are required.

Paragraphs (ii), (iii) and (iv) of Condition 9 read:

"9. (ii) Any defect which may appear, either of material or of workmanship, during the period of maintenance provided by the Contract, shall be made good by the Contractor at his own expense, as and when directed.

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(iii). If the Contractor shall fail to carry out any such order, as by the preceding sub-clauses provided within such reasonable time as may be specified in the order, the materials or work so affected may, at the option of the Engineer be made good by him in such manner as he may think fit, in which case the cost thereby incurred shall, upon the written certificate of the Engineer, be recoverable by the City Council as a liquidated demand in money.

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(iv). If any defect be such that, in the opinion of the Engineer, it shall be impracticable or inconvenient to remedy the same, he shall ascertain the diminution in the value of the works due to the existence of such defect and deduct the amount of such diminution from the sum remaining to be paid

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to the Contractor, or failing such remainder, it shall be recoverable as a liquidated demand in money."

The last fourteen words of paragraph (iv) are interesting. Under paragraph 15 of the first Part of the Specification, which will presently be noticed, the Contractor is only to receive 95% of the value of the work properly executed on completion and taking over by the Council and the remaining 5% is to be retained during the six months' period of maintenance provided for in paragraph 14 on the same page of the Specification and is, on the termination of that period, to be Therefore, under this paid to the Contractor. contract, there would be a "sum remaining to be paid to the Contractor" until the expiry of the period of maintenance. Yet Condition 9(iv) provides that "failing such remainder" the amount may be recoverable as a liquidated demand in money. It is possible that the 5% might have been exhausted in meeting claims for defects previously discovered; but this provision does seem to indicate that it was contemplated that sums might be recoverable for defects after the expiration of the period of maintenance.

## General Condition No.16 reads:

"16. Payment shall be made to the Contractor by instalments in accordance with the provisions of the Specification, under the Certificates therein stipulated to be issued by the Engineer to the Contractor.

No certificate so issued by the Engineer shall of itself be considered conclusive evidence as to the sufficiency of any work or materials to which it relates so as to relieve the Contractor from his liability to execute the works in all respects in accordance with the terms and upon and subject to the conditions of this Agreement or from his liability to make good all defects as provided thereby."

It should be noted that the second paragraph of this Condition refers to a certificate "so issued", i.e. to payment certificates issued under paragraph 15 of the Specification (which will presently be referred to) and not to certificates

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certifying the date of completion under Condition 7(iv) <u>supra</u>. Thus, there is express provision that no payment certificate shall be conclusive; but there is no such express provision regarding a certificate given under Condition 7 (iv).

General Condition No.17 reads:

"17.(i). The Engineer may at any time during the progress of the Works, by order in writing under his hand, make or cause to be made any variations from the original Specification and Drawings by way of addition or omission or otherwise deviating therefrom, and the said Works shall be executed according to the said variations or deviations under his direction and to his satisfaction, as if the same had been included in the said original Specification and Drawings; and any work or materials which shall be ordered not to be done, or used, shall be omitted and shall not be used by the Contractor."

Again, construing this with Clause 2 of the Deed, a variation or deviation requires a written direction from the City Engineer himself.

Condition No.23 paragraphs (i) to (iv) read as follows:

- "23(i). In case at any time during the progress of the works -
- (a) any unnecessary delay shall occur in the carrying out of the same through some default of the Contractor; or
- (b) the Contractor shall not carry out the said works to the satisfaction of the Engineer, or,
- (c) the Contractor shall fail to comply with the directions given by the Engineer, or
- (d) the Contractor shall at any time neglect or omit to pull down or remove any work or materials which the Engineer shall have certified in writing to be defective or not according to the Contract then and in any such case, the Engineer

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- (ii) If the Contractor shall -
- (a) fail to comply with the instructions given in such written notice to the satisfaction of the Engineer, within six days after such notice shall have been given

then, and in any such case, the Engineer shall be at liberty, without avoiding the Contract, to take the said Works wholly or partially out of the hands of the Contractor and to enter upon and take possession of all materials, plant, tools, implements and things on or about the said Works ....

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(iii) If the Engineer shall exercise the powers above described, he may complete the Works himself or may engage any other person to complete the Works and exclude the Contractor .... "

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It seems that the words in sub-paragraph (d) of paragraph (i) "then and in any such case" to the end of the sub-paragraph should apply to the whole of paragraph (i) and not only to sub-paragraph (d). Nothing, however, turns upon this.

Condition No.26(i) is an arbitration clause and reads:

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"26(i). If any dispute shall arise between the Engineer and the Contractor as to anything contained in or incidental to the Contract otherwise than such matters or things hereinbefore left to the decision or determination of the Engineer, every such dispute shall at the instance of either party, be referred to arbitration and unless the Engineer, and the Contractor concur in the appointment of a single arbitrator, the reference shall be to two arbitrators and every such reference shall be deemed a submission within the meaning of the Arbitration Ordinance, 1913, and any Ordinance in amendment

thereof or in substitution therefor, and shall be subject to the provision of such Ordinances."

It will ne noted that this clause applies only

- (a) to disputes between the Engineer and the Contractor; and
- (b) to matters not left by the Conditions to the decision or determination of the Engineer. Condition No. 27 reads:

"27. If any clause, stipulation or provision contained in any contract document shall be wholly or partially repeated in the same document or contained in these Conditions or in the Contract Agreement and also in the Specification or on the drawings, the Engineer may at his option, adopt either of such clauses, stipulations or provisions."

This would not, in my view, entitle the Engineer to override the provisions of the Deed. This condition would, under Clause 4 of the Deed, only operate to the extent that it is not inconsistent with the Deed.

The Form of Tender signed by the Contractor begins with the following words:

"I/We hereby undertake to supply all labour, plant, tools, materials, transport etc., and to execute and perform in accordance with the attached Drawings, Specification, General Conditions of Contract and to the entire satisfaction of the City Engineer, all works necessary to complete the buildings and erections enumerated below, together with all works pertaining thereto for the total sum stated below."

The heading of the Specification is:

"Specification of works required to be done and materials to be provided and used in the erection, completion and maintenance of the 161 dwelling units together with 18 ablution units and all works pertaining thereto, for the City Council of In the Court of Appeal for Eastern Africa

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Nairobi, under the supervision of and to the entire satisfaction of the City Engineer."

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Paragraph 1 of Part 1 of the Specification reads:

"1. Scope The Contract is for the erection, of concompletion and maintenance intract. cluding the supply of all necessary labour and materials, of 'Doonholm Neighbourhood, Stage 1, Part C.' (This should be 'Part B') 'African Housing Scheme', as shown on and in accordance with the Contract, Drawings, this Specification and the General Conditions of Contract and to the entire satisfaction of the City Engineer."

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## Paragraph 2 reads:

"2. Ent- Any details of construction irety of which are fairly and obviously Contract. intended and which may not be definitely referred to in the Specification and/or drawings, but which are usual in sound building construction practice and essential to the works, are to be considered as included in the Contract."

Paragraphs 14, 15 and 17 of Part 1 of the Specification read:

"14. Period The period of maintenance of of main- any dwelling and/or ablution tenance. blocks shall be six months after the date of completion of the block as certified by the City Engineer under Clause 7 of the General Conditions.

"15. Terms Payments will be made on Certiof pay- ficates issued by the City
ment. Engineer at his discretion.
Interim payments shall not exceed
90% of the value of the work properly
executed. When the work has been satisfactorily completed and taken over by the
Council, the Contractor shall be entitled to
a Certificate for 95% of the value of the
work so executed. The remaining 5% shall be

paid to the Contractor at the termination of the period of maintenance as laid down in Clause 13 hereof.

The value of any materials which it is intended to use in the work and which are unfixed will not be included in any interim payment certificate."

"17. Cash The Contractor is required to deDeposit. posit with the Council the sum of
Shs.50,000/- as surety for the due
performance of the Contract. This
sum must be deposited when the
Contract is signed and will be refunded when
the final certificate is issued by the City
Engineer."

Paragraphs 23 and 25 read as follows:

"23. Exca- The whole area covered by the vation. buildings, plus the extra width and length necessitated by the excavation to foundations shall be excavated down to rock or murram suitable for foundations and the black cotton soil resulting from the excavation shall be entirely removed as specified below. The excavated area shall be entirely free of all black cotton soil before foundation works or filling proceeds.

The Contractor is to allow in his tender for the excavations and footings being carried down to a depth over any building to allow 4 courses of stone work between top of foundation concrete to underside of concrete floor slab. Any greater or less depths of foundation work found to be necessary shall form the subject of Variation Orders .... "

"25. Bottoms Trenches for foundations etc., of trenches. are to be excavated down to a solid hardrock or murram bottom as specified and levelled before laying concrete. All bottoms are to be approved by the City Engineer before concrete is laid."

Paragraph 26 reads:

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Paragraph 6 of the Part of the Specification headed "Concretor" (p.5.) reads:

"6. Mixing. All materials for concrete are to be well mixed by means of an approved mechanical mixer ...."

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Paragraphs 8 and 9, so far as material, read:

"8. Foun- Concrete in foundation is to be a 1:3:6 mix composed of cement, concrete. sand and aggregate mixed in the following proportions ....

9. Con- Concrete in floors, channels, crete in drains, troughs, etc. to be a l:3:6 mix as specified above and consolidated to the thickness shown on the drawings."

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There are some provisions in the Specification requiring approval of the City Engineer during the course of the Works. For instance, paragraph 25 of Part I quoted above requires that bottoms of trenches are to be approved by the City Engineer before concrete is laid; and paragraph 15 of the Part entitled "Mason" on p.6 provides that samples of stone and dressing are to be submitted to the City Engineer for approval (See also paragraphs 46 and 52). It will be observed that the term is "City Engineer" and not "Engineer" as defined in General Condition (i) of (1) and that "Approval" under General Condition l(ii) means approval in writing.

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The above are, I think, all the relevant provisions of the contract documents and it will be convenient now to consider the learned Judge's findings in respect of each of the Issues set out above and the objections to such findings raised on the appeal.

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As to Issue No.1, it was argued on behalf of the Council in the Court below, as regards the

eleven blocks taken over, that the Contractor's claim was premature because no certificate for payment of the 5% remaining due to the Contractor had been issued. I do not agree. Nothing in the contract requires the issue of a further certificate after the issue of the certificate entitling the Contractor to 95% of the value of the work. Moreover, I agree with the learned Judge that the letters of acceptance by the Chief Engineer operated as certificates of completion and caused the maintenance period to commence. Neither do I think that the Contractor's claim was premature in relation to the six blocks not taken over. The Council had apparently required him to carry out further remedial work which he refused or neglected to do and left the site. The Council then proceeded to carry out the work and the Engineer declined to certify for, and the Council declined to pay, the balance of 10% which the Contractor said was due to him on the contract. I am not convinced that the Council committed any breach of Condition 23 as found by the learned Judge; but once the dispute had broken out and the Chief Engineer had declined to issue further payment certificates in respect of the six blocks to which the Contractor felt himself entitled, I think that the Contractor was justified in bringing a suit. I would answer Issue 1 in the negative.

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As to Issue No.2 the learned Judge found that the Contractor's claim was not barred by limitation and there is no appeal against that finding.

As to Issue No.4, I do not think that if the Contractor is otherwise entitled to the sum claimed or any part of it, the absence of a final certificate (assuming that by this is meant a certificate, under Clause 15 of the Specification, for payment of 95% of the value of the work done) would preclude him from claiming. He could ask for arbitration or bring a suit to establish his right to a certificate and to payment. The learned Judge answered this issue in the negative and I agree, though not for precisely the same reasons.

It will be convenient next to deal with Issues Nos. 3, 5 and 6.

The learned Judge, having reviewed the evidence, answered Issue No.3 as follows. He applied

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"Issue No.3. I find that the works have been substantially completed in accordance with the contract, with some defects in respect of which the Council is entitled to a reduction in the amount recoverable on the contract."

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Mr. Stewart Brown, for the appellant, submitted that while the principle of <u>Dakin v. Lee supra</u> applies to lump sum contracts where there is no provision for retention monies, it has no application to a contract where payment is to be made by instalments and retention money is only payable on perfect completion. <u>Dakin v. Lee</u> was a case of a lump sum contract; it was there argued that, as the contractor had not entirely completed the contract, he was not entitled to recover anything. It was held that he had substantially completed the contract and could recover for his services. But <u>Dakin v. Lee</u> was not a case where provision was made in the contract for retention money. In <u>Hoenig v. Isaacs</u> (1952) 2 All E.R. 176 Denning L.J. said at p.180:

"This case raises a familiar question: Was entire performance a condition precedent to payment? That depends on the true construction of the contract ...

In determining this issue the first question is whether, on the true construction 30 of the contract, entire performance was a condition precedent to payment. It was a lump sum contract, but that does not mean that entire performance was a condition precedent to payment. When a contract provides for a specific sum to be paid on completion of specified work, the courts lean against a construction of the contract which would deprive the contractor of any payment at 40 all simply because there are some defects or omissions. The promise to complete the work is, therefore, construed as a term of the contract, but not as a condition. not every breach of that term which absolves the employer from his promise to pay the price, but only a breach which goes to that root of the contract, such as an abandonment

of the work when it is only half done. Unless the breach does go to the root of the matter, the employer cannot resist payment of the price. He must pay it and bring a cross-claim for the defects and omissions, or, alternatively, set them up in diminution of the price. The measure is the amount which the work is worth less by reason of the defects and omissions, and is usually calculated by the cost of making them good: see Mondel v. Steel; H. Dakin & Co. Ltd. v. Lee and the notes to Cutter v. Powell in SMITH'S LEADING CASES 13th edn. Vol. 2 pp.19-21. is, of course, always open to the parties by express words to make entire performance a condition precedent. A familiar instance is when the contract provides for progress payments to be made as the work proceeds, but for retention money to be held until completion. Then entire performance is usually a condition precedent to payment of the retention money, but not, of course to the progress payments. The contractor is entitled to payment pro rata as the work proceeds, less a deduction for retention money. But he is not entitled to the retention money until the work is entirely finished without defects or omissions."

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Keating in his work on Building Contracts at 30 p. 34 summarises the position as follows:

> "SUBSTANTIAL COMPLETION. In the ordinary lump sum contract the employer cannot refuse to pay the contractor merely because there are a few defects and omissions. If there is a substantial completion he must pay the contract price subject to a deduction by way of set-off or counter-claim for the defects.

> ENTIRE COMPLETION. The parties may if they choose by clear language show that they intend that the contractor should be entitled to nothing until he has completed the contract in every detail, or that he should not be entitled to the retention money until he has so completed the contract.

NON-COMPLETION. If the contractor fails to complete, either substantially in the ordinary case, or in every detail in the special

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case referred to in the last paragraph, he is not entitled to anything unless he can show either:

- (i) A contractual right to unpaid instalments, or
- (ii) Prevention of completion by employer,

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- (iii) Implied promise to pay for the work done by way of waiver or acceptance, or
- (iv) Impossibility or frustration."

Paragraph 15 of the Specification in the present case provides that payments will be made on certificates issued by the Chief Engineer at his discretion: interim payments are not to exceed 90% and "When the work has been satisfactorily completed and taken over by the Council, the Contractor shall be entitled to a Certificate for 95% of the value of the work so executed", and after the expiration of the maintenance period to the remaining 5%. This seems to me to be clear language to the effect that payment of the retention money depends upon (a) satisfactory completion of the work and (b) its taking over by the Council. As regards the six blocks, the work has been held not to have been satisfactorily completed in all respects and the Council has not taken them over. Accordingly, the Contractor is not entitled to payment of the retention money in respect of those blocks unless he has shown one of the matters mentioned under (i) to (iv) above, e.g. waiver, or that the refusal to take over the six blocks was unjustified. Prima facie he would be entitled to the retention money in respect of the eleven blocks which have been taken over subject to any right which the Council may have to show that the work was not, in fact, satisfactorily completed and to sue for defects notwithstanding acceptance of those blocks. This is discussed below.

As to Issue 3, then, I accept the learned Judge's finding of fact that the works have been substantially completed in accordance with the contract, with some defects; but, with respect, I do not think that the principle stated in <u>Dakin</u> v. Lee applies to the retention money in this case. The retention money is only payable on satisfactory completion, on entire performance, and substantial

completion is not enough.

As to Issue 5, the learned Judge found:

"Issue 5. I find that the Contractor has -

- (a) failed to maintain the specified mix for mortar and concrete in a proportion of the mortar and concrete used, or that the mix was not properly mixed or laid, the result in either case being defective mortar and concrete;
- (b) failed in certain other comparatively minor details to comply strictly with specification, e.g. hoop-iron reinforcement; bitumen damp course; fixing of door frames.
- (c) failed to comply strictly with a number of other specifications as detailed earlier in this judgment, but that in each of these cases the variations were either expressly directed by or else known to and accepted by the Architect or Clerk of Works, acting for the Engineer."

I accept these findings. They will be referred to later.

As to Issue 6, the learned Judge found:

"Issue 6. I find that the acceptance of work by the Engineer or Architect on his behalf with express knowledge of variations from the terms of the Specification and the issue of certificates in respect of such work amounts to a waiver by the Engineer as agent of the Council of any breach of contract that might be constituted by such variations."

The question (involved in Issue No.6) of the extent to which the Council is bound by acceptance of the work by the City Engineer or Architect on his behalf, the Architect having actual knowledge of deviations from the terms of the General Conditions and the Specification, is probably the most important question in the case and it will be desirable to consider it now. It involves two subsidiary questions:

(i) whether the City Engineer or the Architect had authority actual or ostensible, by oral acceptance

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of inferior materials and work, to waive the due performance of the contract; and (ii) whether the issue by the City Engineer of letters of acceptance and certificates for payment of 95% of the value of the work in respect of the eleven blocks, Mr. Tanner and perhaps the City Engineer having notice of the defects, was conclusive against the Council and prevented them from subsequently alleging and claiming for defects.

The learned Judge dealt with these matters as follows. After setting out the provisions of the contract documents which he considered relevant, he said:

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"It is, I think, clear from these provisions and from the contract documents as a whole that the general control of the contract on behalf of the Council was in the hands of the City Engineer. The City Engineer could order variations and extras. The work was to be performed to the satisfaction of the Engineer. The Engineer was to issue certificates for payments. From the general tenor of the contract documents I think there can be no doubt that the intention was that the City Engineer should be the agent of the Council for the purposes of this contract, and, in fact, all dealings between the Contractor and the Council were conducted on the Council's side by the City Engineer or his subordinates."

I respectfully agree, except that the work was to be done to the specified standards with the specified materials and to the satisfaction of the Engineer. This will be referred to later. It has also been noted that the authority of the Engineer to demand or sanction departures from the contract which the Council had made was limited to written notices or to written consents.

The learned Judge continues:

"Subordinated to the City Engineer were the Architect and the Clerk of Works. It is not easy to define their precise authority, particularly that of the Architect, under the contract documents. It was conceded that the Architect was in fact duly authorised to represent the Engineer under Clause 1(i) of the General Conditions, and the General

Conditions authorise the "Engineer" as therein defined to give directions in writing for extras and variations. On the other hand, Clause 2 of the Contract requires the extras and variations to be authorised by the City Engineer himself, and, by virtue of Clause 4 of the Contract, this provision must prevail over the provisions set out in the General Conditions. I conclude that under the contract documents authority to order extras or permit variations is limited to the City Engineer personally. And in fact the only variation orders issued - Exhibits 18, 19 and 20 - were signed by the City Engineer himself. On the other hand I am satisfied that the Architect on behalf of the Engineer had authority under the contract to approve work and to give instructions and explanations within the scope of the specifications. The contract documents do not provide that 'instructions' or 'explanations' are to be in writing, though it is perhaps difficult to see what the difference is between an instruction and a direction. In the Court of Appeal for Eastern Africa

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The learned Judge then reviewed the position of the Clerk of Works and said that any authority that he might have had on behalf of the Engineer was very limited. He said:

"In the case of Mr. Stone it would appear that Mr. Tanner deputed him to see that work done was done up to the standard set by Mr. Tanner, but in the circumstances of the case I do not think this is very material. The evidence which I have accepted is to the effect that Mr. Tanner saw and approved or directed certain standards of work and that work seen by Mr. Stone though not by Mr. Tanner came up to those standards. It is therefore of little moment whether or not Mr. Stone was authorised to accept that work."

The learned Judge proceeded to consider to what extent the interim payment certificates and letters of acceptance of certain blocks issued by the City Engineer were conclusive. He said:

"As I have stated, the contract documents expressly provide that the work is to be done to the satisfaction of the Engineer.

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Judgment, 10th December 1958 continued. Considerable argument turned on whether and to what extent the certificates for interim payments and the acceptance of certain blocks were conclusive in this respect. There is no provision in the contract documents that the certificates are to be conclusive. On the contrary Clause 16 of the General Conditions provides that -

'No certificate so issued by the Engineer shall of itself be considered conclusive evidence as to the sufficiency of any work materials to which it relates so as to relieve the contractor from his liability to execute the works in all respects in accordance with the terms and upon and subject to the conditions of this Agreement or from his liability to make good all defects as provided thereby.'

It is abundantly clear from this that no such certificate is conclusive as regards any latent defect - that is any defect of which the Engineer was not aware. The position, however, appears to me to be vitally different where the Engineer (or the Architect acting on his behalf) was fully aware of the alleged defect and accepted it - in some cases directed it."

Counsel for the respondent did not seek to support the finding that Condition 16 does not apply to patent defects and, with respect, I do not think it can be sustained. Condition 16 expressly applies to all defects. The distinction between latent and patent defects may be important in other contexts, but, with respect, not as regards Condition 16.

The learned Judge continued:

"Clause 9(i) enables the Engineer during the course of the work to order the removal of materials and the re-execution of work not up to specification. Where the Engineer has not made use of this Clause but with full knowledge has accepted work as satisfactory

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and subsequently issues a certificate in respect of that work, I consider that the certificate must be held to be conclusive in so far as the Engineer had knowledge of the quality of the work and materials; that the issue of the certificate operated as a waiver of strict compliance with the specification; and that the Engineer cannot subsequently exercise the power conferred by the clause (Hudson on Building Contracts, 7th Edn. p.239 citing Adcock's Trustee v. Bridge R.D.C. (1911) 75 J.P. 241."

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The passage in Hudson to which the learned Judge here refers merely says that where the architect has power to order the contractor to reexecute defective work or remove inferior materials during the progress of the works and has seen the works in the course of execution and the materials used, but has not ordered the re-execution of the work or the removal of the materials, he can no longer exercise the power when the work is com-This refers to the power of an architect to order re-execution of work during progress of the work and not, with respect, to the right of the building owner to sue for defective work. seems that the learned Judge did not have the report of Adcock's case before him (which, by courtesy of Mr. Stewart Brown, I have been able to If he had had this, it would, I think, have been clear to him that the fact that the architect does not act during progress of the work under a clause empowering him to order re-execution of bad work does not prejudice the other remedies of the building owner. The learned Judge continued:

"It was argued, relying on Robins v. Goddard (1905) 1 K.B. 294, that by virtue of the arbitration clause the certificate could not be held to be conclusive. The arbitration clause does not expressly provide that the arbitrator shall have power to open up and review any certificate, as was the case of the contract considered in Robins v. Goddard. I would, however, accept the proposition that by virtue of the arbitration clause the certificates issued are not conclusive, but I do not think this adds anything to the express provisions of Clause 16 of the General Conditions.

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The basis of my finding is that under this contract the Engineer was the agent of the Council for the purpose, inter alia, of passing the work as satisfactory. There is some reason to believe from the evidence that the City Engineer, by reason of personal visits to the site, must have been aware from his own observation of the general standard of the work of the 10 Contractor; but in any case, as I have said, it has been conceded that the Architect was duly authorised under Clause 1(i) of the General Conditions to represent the Engineer and I consider that the knowledge of the Architect must in the circumstances be regarded as the knowledge of the Engineer; and acceptance of work by an owner (or his agent authorised in that behalf) with knowledge of defects does disentitle the owner from claiming for those defects. (Halsbury 3rd Edn. Vol.3 p.454 and Bombay Furniture Works v. Gross, E.A. Civ. App. 94 of 1955 (unreported)."

With great respect, I do not think that the statement of the learned Judge that "acceptance of work by an owner (or his agent authorised in that behalf) does disentitle the owner from claiming for those defects" is a correct statement of the law or is supported by the authorities referred Acceptance with knowledge is not to by him. enough. There must be actual waiver as well. Paragraph 867, p.454 of Halsbury, 3rd Edn. Vol.III, which I think is a correct statement of the law and borne out by the authorities there cited, reads:

## "Effect of acceptance with knowledge of defects.

Unless it can be shown that the employer has not only accepted the work with a knowledge of the defects, but also has actually waived the condition as to performance in accordance with the contract, the acceptance will not prevent the employer from showing that the work was incompletely performed or was not in accordance with the contract.

Knowledge of the defects at the time the work was done is not sufficient

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to imply acquiescence in them so as to preclude the employer from exercising any rights he may have in respect of the incomplete performance of the contract:

Whitaker v. Dunn (1887) 3 T.L.R. 602.

Where the work, however, has been done to the approval of the employer if he has expressly or impliedly notified his approval he cannot go back on it and recover for patent defects - Bateman (Lord) v. Thompson (1875) 2 Hudson's B.C. 4th edition 35 - and it is submitted that in such a case payment by the employer might be held to imply approval so as to prevent him from bringing an action against the contractor for damages on account of the defective work.

Where the work is to be done to the approval of a third person such as an architect or engineer, and the expression of that person's opinion is conclusive, then, in the absence of fraud or collusion, such approval prevents the employer from having any right of action on account of defects, whether latent or patent. If the expression of the third person's opinion is not a condition precedent or is not final, for instance where it is subject to arbitration, the expression of that person's approval does not prevent the employer setting up a claim on account of defects."

In the present case there was no express requirement that the work had to be done to the it had to be done to approval of the employer: certain specified standards (General Condition No.2(i), and to the satisfaction of the Engineer (General Condition No.3). I think that the City Engineer was the agent of the Council to accept the work on behalf of the Council (though an agent with limited authority, in that acceptance of any work or materials which diverged from contract requirements must be in writing); but that in the matter of expressing satisfaction or dissatisfaction he was bound to act fairly between In exercising that function the the parties. City Engineer had quasi-arbitral duties to perform and to that extent was a third party. There was no express provision in the contract that the

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Judgment, 10th December 1958 continued. City Engineer's opinion was to be final. As to payment, there was express provision that no payment certificate issued by the Engineer was of itself to be considered conclusive as to the sufficiency of work or materials.

Bombay Furniture Works v. Gross supra cited by the learned Judge is not, with respect, an authority for the proposition that mere acceptance of work by an agent authorised in that behalf with knowledge of defects disentitles the owner from 10 claiming for those defects. In that case the agent had authority, or was held out by the building owner as having authority, to make the building contract and to pass the work as satis-There was no provision, such as there factory. is in the present case, requiring the work to be done to certain standards and limiting the authority of the agent to permit deviations from the provisions of the contract by requiring his consent to 20 such deviation in writing or providing for a maintenance period and retention money. grounds for the decision of this Court in the Bombay Furniture case were not merely that the agent had power to accept the work, but that he had power to waive complete performance of the contract and had done so.

"Acceptance will not prevent the owner from showing that the work is incomplete or badly done .... " <u>Hudson</u> 7th Edn. p.236 citing <u>Dakin (H) & Co. Ltd. v. Lee supra.</u>

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As has been said above, this contract does not merely require that the work is to be done to the satisfaction of the City Engineer (General It also requires that the work Condition 3). shall be executed and performed in a good and workmanlike manner with the best materials and workmanship in accordance with the Contract Agreement, the Specification, etc. (General Condition No.2(i). The appellant contends that on the face of the contract there is a dual obligation. It is important to consider whether there is a dual obligation imposed by independent covenants or whether the description of the standards is mere surplusage and the certificate of, or acceptance by, the Engineer is conclusive as to the quality. On this point there is some conflict of authority. Counsel for the appellant contends that the undertaking to execute the works in a good and workmanlike manner with the specified materials is the

primary obligation and that the obligation to satisfy the Engineer is something added to, and not in substitution for, the primary obligation, something super-added for the further protection of the Council. He relies on Petrofina S.A. of Brussels v. Compagna Italiana Transporto Olii Minerali of Genoa (1937) 53 T.L.R. 223, and (on appeal) 650; and Newton Abbot Development Co. v. Stockman, 47 T.L.R. 616. In the Petrofina case the appellants had chartered a steamer from the respondent shipowners for the carriage of a cargo The charter party contained a clause to the effect that the steamer was in every way fitted for the voyage and a clause (clause 16) providing that the captain was bound to keep the tanks pipes and pumps of the steamer always clean. It also contained a clause: "(27) Steamer to clean for the cargo in question to satisfaction of charterer's inspector." The inspection was carried out and the ship accepted by the charterers as fit to load. The oil having become soiled on the voyage, the charterers alleged that the discolouration was due to the condition of the ship's The owners contended that their liability tanks. in the charter party was to clean the tanks to the satisfaction of the charterers which they did, and that they were protected by the terms of the charter party from liability for any such discolouration. Singleton J. held that clause 27 was a clause which was super-added for the purpose of the charterers: it did not cut down the express warranty of seaworthiness contained in the earlier clauses or relieve the ship from responsibility: if the shipowners desired to exclude themselves from the express warranty, they should have used terms much more express, pertinent and apposite than they had done. On appeal, the judgment of Singleton J. was upheld. The Master of the Rolls said, at p.653.

"So far, on this assumption of fact, there can be no question as to the liability of the ship-owners. But Mr. Devlin has argued that clause 27 has the effect of excluding this fundamental obligation and substituting for it an obligation merely to clean - that means to clean the holds before loading the cargo in question - to the satisfaction of the charterers' inspector. His argument is that that is a clause which is inserted for

the owners' benefit, in this sense, that it

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We are dealing with a contract of affreightment, and it is necessary to bear in mind the well-established view which has been so often stated, that if it is sought to effect a reduction of the over-riding obliga-10 tion to provide a seaworthy ship, whether that is express or implied for this purpose does not matter, by other express terms of the charter-party or contract of affreightment, that result can only be achieved if perfectly clear, effective, and precise words are used expressly stating that limitation. I think that the language of clause 27 here is not sufficient. To make it sufficient I think it would need to be amplified in something 20 like this manner. It would have to run: Steamer to clean for the cargo in question to the satisfaction of the charterers! inspector and if that is done that shall be treated as fulfilment of the obligations under clauses 1 and 16. Clause 27 does not say I think, on the contrary, it has a much more limited effect. It gives, as I think, an added right to the charterers. They are entitled before they load the cargo 30 to have an inspection, and to have a certificate, or whatever the form of the evidence is, that their inspector is satisfied. But, without express words, the satisfaction of the inspector cannot be relied on by the owners as a discharge and fulfilment of their obligations. From the point of view of the charterers this super-added right is something which it is worth their while to have. gives them some sort of guarantee against 40 their being involved in questions such as this, where, unfortunately, notwithstanding the inspection, there had been a failure to provide tanks sufficiently clean and in proper condition."

Romer L.J. said at p.654:

"It is inherent in construction to give effect, where it is possible, to every part of

a written document, none the less because the document happens to be a charter-party. the present case, therefore, we must give effect both to clause 16 and to clause 27 of this charter-party, if it be possible. my opinion, it is possible. In clause 16 the owner undertakes to keep the tanks, pipes and pumps of the steamer always clean. In construing clause 27 you must do so with the knowledge of the fact that by clause 16 that obligation has been undertaken in plain terms by the owner. That being so, it is plain that the true construction of clause 27 is this - that the owner is saying: 'I have by clause 16 undertaken in plain terms the obligation of keeping the tanks clean. Not only will I keep the tanks clean, but I will keep them clean to the satisfaction of the charterers' inspector.' The result is that the owner can only discharge his obligations in respect of cleaning under the charterparty by cleaning the tanks, keeping them clean, and doing so to the satisfaction of the charterers inspector. If he keeps them clean, and does not obtain the approval of the charterers' inspector, he has not fulfilled his contract. Nor has he fulfilled his contract if he fails to keep them clean but the charterers' inspector has expressed his approval of the state of the tanks."

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That was a case of a contract of affreightment, but the same principle has been applied to a building contract. In Newton Abbot Development Co.Ltd. v. Stockman Bros. (1931) 47 T.L.R. 617, the defendants agreed to build 18 houses for the plaintiffs. The houses were to be built in accordance with plans and specifications attached, and the work was to be carried out to the satisfaction of the surveyor and the sanitary inspector of the Newton Abbot Urban District Council. The houses were completed to their satisfaction and sold to pur-It was argued that an express agreement relating to cement and the implied agreement that the work should be properly done had been broken. Roche J. said at p.617:

"It was contended that as the surveyor and the sanitary inspector had expressed satisfaction with the houses there was nothing more to be said. But there was nothing in

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There is an old case on a double obligation which may be in point: Bird v. Smith, 12 Q.B.786; 116 E.R. 1065. In that case, on a contract for sale to the plaintiffs of iron rails in which it was provided that the rails were to be inspected and certified before delivery by an agent of the plaintiffs who was to be at liberty to approve and accept for the plaintiffs as he should think fit and certify as he should think fit, and that the rails were to be in quality equal to any rails made in Staffordshire, it was held that a plea that the rails had been inspected, certified and accepted in performance of the agreement was insufficient, as it dealt only with the provision for inspection and not with the warranty of quality. Denman C.J. said at p.1068:

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".... each stipulation is in its terms distinct, and in its nature, as an absolute warranty for quality, may well be required in addition to a provision for inspection and approval, to guard against defects which inspection cannot discover."

Mr. O'Donovan, for the respondent, dissented from the proposition that the provision requiring work to be done to the satisfaction of the Engineer was only a superadded obligation. He contended that the satisfaction of the Engineer was the required criterion and that if that had been obtained, it was conclusive. He relied principally on Bateman (Lord) v. Thompson supra at p.30; and also on Dunaberg Railway v. Hopkins, 36 L.T. 733.

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It will be necessary to examine Lord Bateman's case at some length. In that case a contract was entered into in the year 1856 for building work to be done by the defendant's firm on Lord Bateman's residence in Herefordshire. In the contract deed were, inter alia:

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(B) a covenant by the contractors that they would "... in a good and substantial and workman-like manner and with the best materials of their several kinds (to be provided in part by

the contractors and in part by Lord Bateman)
... but in every event and particular to the
satisfaction in all respects of the architect
and of the said Lord Bateman ... make,
execute and complete the ... works described
in the specification and drawings";

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- (C) a covenant by the contractors that they would carry out any alterations desired by Lora Bateman on the written instructions of the architect;
- (E) a provision whereby it was agreed by the parties "that the decision of the architect with respect ... to the completion of the said works or any portion thereof respectively and also with respect to every question which may arise concerning the construction or effect of the said specification, drawings, plans, designs, and instructions, or any of them, shall at all times be final and conclusive on the contractors";
- (F) a provision requiring the contractors during the progress of the work or within twelve months thereafter upon notice in writing from the architect (which might be given notwithstanding any certificate previously given by him as to the due execution of the works) to take down and replace unscund work, and if the contractors failed to do so, a provision empowering Lord Bateman to take down and replace the work at the cost of the contractors.

(G) a proviso in the following terms: "... if at any time within a period of twelve months from the date of the final certificate of the architect that all the works have been well and truly performed to his satisfaction ... and either before or after the contractors ... shall have received ... the sum of money hereinbefore contracted to be paid ... it shall appear that the contractors have used any unsound materials or have in any other way not performed the said works ... in a substantial, workmanlike and proper manner ... it shall be lawful for the said Lord Bateman ... notwithstanding ... any certificate which may have been given by the architect of the due completion of the

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The works were completed and approved by Lord Bateman and the architect in 1861, and were paid for.

Much more than six years having elapsed and certain defects having appeared, due mainly to the use of unsuitable stone some of which had been sanctioned by the architect and some not, Lord Bateman brought an action for damages against the contractors. It was found as facts that bad materials had been used and that there had been bad work on the part of the contractors, but it was held that, as both the architect and Lord Bateman had approved of them, the action failed.

The passage relied upon by Mr. O'Donovan is in the judgment of Lord Coleridge C.J. in the Common Pleas Division at p.30 of the report.

"The question is whether there was any breach of this contract. I am of opinion that even without the proviso, upon the true construction of this contract, no action lies. The contractor is to perform the work in a good, substantial and workmanlike manner, and with the best material of their several kinds, and to the satisfaction of the architect and Lord Bateman. think is the true construction of that contract. They are to be good, substantial, and workmanlike, and to his satisfaction that is to say, he is to be satisfied that they are good, substantial and workmanlike materials and work. He was so satisfied, and within the terms of this contract both he and his architect, the architect by his certificate and Lord Bateman by his conduct, as a matter of fact, were satisfied within the words of the contract, and accordingly the covenant in this deed was in its term performed by the defendant, and having been performed by the defendant clearly no action lies upon it. I must say the matter is clear to my own mind upon the construction

of the contract irrespective altogether of the proviso.

If there could be any doubt about it, it appears to me that it is taken away altogether by the proviso, because the proviso says if in spite of the certificate of the architect of the works having been well and duly performed, which I already assume has been given, and in spite of the works having been certified as having been completed, which I have already said has been certified as having been done, if in spite of that Lord Bateman within a year after the giving of the certificate, finds out such a thing as has been suggested by Mr. Matthews, although I did not find it stated in this case that there has been a conspiracy between the architect and the builder, he may set the certificate aside, and that if he finds there is a gross defect disclosed twelve months after the certificate has been given, that he may then bring his action."

Grove J. inclined strongly to the construction that there was not a double covenant to supply the best materials and to satisfy the architect, but that the supply of the best materials was to be subordinated to the satisfaction of the architect and of Lord Bateman and that if after proper inspection they were satisfied, the covenant was to be taken as complied with; and he said that even if he were to take it otherwise, the proviso (G) when read with the covenant showed that the parties intended to limit any right against them to twelve months after the final certificate of the architect. Grove J. relied heavily on that proviso on which, he said (p.34), that the decision of the case mainly depended, and also on the pro-vision ('E' above) that the decision of the architect with respect to the state and condition and completion of the works should be final and conclusive on the contractors. He said at p. 36:

"Therefore I agree with my Lord, although I do not think it is absolutely necessary to the decision of the case that the question of soundness or unsoundness is to be decided by the certificate of the architect, and that if it were not for this proviso there would not be an action for

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breach of covenant. I think on the true construction of the deed, taking it altogether, the plaintiff's right of action continues up to the end of the twelve months after the certificate of the architect has been given of the completion of the works, but that after that time the certificate is final and conclusive, therefore I think our judgment should be for the defendant."

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Archibali J. agreed that judgment must be for the defendant. He said at p.36:

"Now the covenant of which the important part provides that the work is to be done in a good, substantial, and workmanlike manner, and with the best materials, goes on to specify that there are some materials to be provided by Lord Bateman and some to be provided by the contractor, but in every event and particular to the satisfaction in all respects of the architect and of the said Lord Bateman. I read that as meaning that this work is to be done in a good and workmanlike manner so as to satisfy Lord Bateman and the architect, and that is what the contractors have stipulated to do, and upon the covenant alone I confess and incline very strongly to the opinion that if that is done, and if that satisfaction is expressed in the way provided that that is a performance of the covenant on the part of the contractor, and that except for the proviso which comes afterwards with regard to the year, no action would be maintainable against him, but if there were any doubt as to whether that was the true construction it would be entirely disposed of, it seems to me, when we look at the other portion of the deed, and, as my brother Grove has already pointed out, the true mode of construing a document of this kind is to look at all the provisions of it and see how they bear upon each other, and to see what

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He relied upon Clause (E) and the proviso (G) as throwing light on the intention of the parties.

light each part reflects upon the rest."

I do not see how, upon the construction of

the deed which was under consideration in Lord Bateman's case the judgment could have been otherwise than for the defendant. But the provisions of the deed under consideration in Lord Bateman's case were so different from the provisions of the contract documents in the present case that I cannot derive from it so much assistance as I In Lord Bateman's case there was a could wish. provision that the decision of the architect with regard to completion of the works was to be final and conclusive on the contractors. It is true that this applied only to the contractors. So far as the owner was concerned, there was a proviso that Lord Bateman, notwithstanding any certificate by the architect of satisfactory completion, could within twelve months from the date of such certificate institute an action for damages for defects appearing within that time. As all the learned Judges pointed out, there would have been no point whatever in that provision if Lord Bateman could institute an action for defects whether or not appearing within that time. These are very different from the provisions of the contract documents in our case. To my mind the only assistance to be derived from Lord Bateman's case is that the learned Judges who decided that case either held the view or inclined to the view that a covenant to construct in a good and workmanlike manner and with the best materials, but to the satisfaction of the architect and the building owner, was complied with if those persons were satisfied. Lord Coleridge would have held this view without the proviso. The proviso was what finally determined the other two learned Judges. Whether it would have made any difference if the covenants had, as in our case, been independent, it is difficult to say.

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The learned author of the Article on Building Contracts in Halsbury 3rd edn. Vol. 3, p.454, paragraph 867, quoted above cites Bateman's case as applying to patent defects and the approval of the employer. But, with respect, it does not appear to me that all the defects in Bateman's case were patent. (See paragraph 17 of the case stated). I find Lord Coleridge's opinion in Bateman's case and the opinion to which the other learned Judges inclined as to the obligation being single and not double very difficult to reconcile with the judgments of Singleton J. and of the Court of Appeal in the Petrofina case and of

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Judgment, 10th December 1958 continued. Roche J. in the Newton Abbot case quoted above. In the last resort each case must depend upon the construction of its own contract documents and the contract in Bateman's case was very different from the one which I have to consider.

I do not think The Dunaberg and Witepsk Railway Co. Ltd. v. Hopkins Gilkes & Co. Ltd. supra
on which Mr. O'Donovan relied, is of any assistance.
In that case there was express provision that the
decision of the engineer on any point of doubt or
dispute should be final and binding on all parties.
It was held that an action for damages for breach
of contract could not be maintained, as the engineer had given a final certificate and the contract showed that the parties intended the final
expression of the engineer's satisfaction with the
entire contract to be conclusive. Thereis no
such express provision in our contract.

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A case which does seem to me to assist the 20 respondent and which was not cited, is Harvey v. Lawrence (1867) L.T.N.S. 571. By a building contract, a builder agreed to repair a house with the best materials of their kind in a perfect and workmanlike manner according to the drawings and specifications, and to the satisfaction of the architect, the work to be done under the architect's directions. The architect certified his satisfaction of the completion of the works. was held in an action by the builder against the 30 owner of the house for money agreed to be paid by the latter, that no evidence could be received from the defendant that the work was not done according to the plans and specifications. Coleridge Q.C. (as he then was) made the point that the words of the contract were "according to the drawings, specifications and directions, and to the full satisfaction" of the owner or his architect and that the word "and" could not be rejected from the Bovill C.J., however, did not deal with sentence. this argument: he decided purely on the fact that 40 the works were to be carried out under the superintendence of the architect and said that that provision precluded the defendant from producing evidence of any variation from the specifications. Smith J. said that the defendant's intention evidently was that the architect should direct the building, and that the work should be completed to the full satisfaction of himself or his architect. Halsbury 3rd edn. Vol. 3 at p.465 cites

this case as one of two authorities for the proposition: "Where the contract provides that work and materials shall be of some prescribed quality, and also that they shall be to the satisfaction of the architect, then, unless the covenants are independent, the description of quality is mere surplusage and the certificate of the architect is conclusive as to the quality." The other authority cited is a Scottish case which is not available here. For what that is worth, the covenants in the present case are independent.

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There seems, therefore, to be some conflict of authority on the question whether an obligation to complete work according to specified standard and to the satisfaction of the owner's agent is a dual obligation or merely a single obligation which is answered by proof of acceptance of the work by the agent. On this point, certainly where the covenants are independent, I prefer to follow the high and comparatively recent authority of the Court of Appeal in England in the Petrofina case supra. In particular, if I may respectfully so say, the words of Romer L.J. quoted above seem to me to be sound law and of universal application. These words were spoken of a charter-party; they are equally applicable to any other contract. The learned Lord Justice said that it is inherent in construction to give effect where possible to every part of a written document and he proceeded to hold that Clause 16 and Clause 27 of the charter-party imposed separate obligations, and that the ship-owner could only discharge his liability by keeping the tanks clean and by keeping them clean to the satisfaction of the inspector. Similarly, in the present contract effect must be given, if possible, both to General Condition 2(i) and to General Condition 3 and I should not, unless forced to do so, treat General Condition 2(i) as Under General Condition 2(i) the surplusage. Contractor assumed an express obligation to do the work in a good and workmanlike manner and with the best materials and workmanship; and I think that, as was held in the Petrofina case, that undertaking could only be curtailed by words much more 'express, pertinent and apposite than those contained in General Condition 3. It is possible in the present case, as it was, in the Petrofina case to give effect to both provisions of the contract. In my opinion, the Contractor could only discharge his obligations under the contract by doing the work to the specified standards with the specified materials and

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doing it to the satisfaction of the Engineer. I think that he would fail to fulfil his contract if he failed to do work to the required standards, notwithstanding that the Engineer might have accepted the work. In the Petrofina case and the Newton Abbot case the defects were latent and not patent, but I do not think that this is material on the question whether the contract imposes a double or a single obligation.

I proceed now to consider whether the acceptance in writing and taking over by the Council by
its agent for that purpose, the City Engineer, of
the eleven blocks is, as the respondents strongly
contend, conclusive, so as to prevent the Council
from setting up a claim for defects in respect of
those blocks. The answer must depend upon the
construction of the contract documents in this case.
We have here a contract which:-

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- (a) contains two clauses, the first requiring the Contractor to complete the work to 20 certain standards and the second requiring that the Engineer shall be satisfied;
- (b) contains no express provision making the satisfaction of the Engineer or the acceptance of the works by him on completion final or conclusive:
- (c) contains provisions (Condition 7(iv) and Specification 15) to the effect that when the works have been executed according to the provisions of the contract and to the satisfaction of the Engineer, the date of such completion shall be certified by the Engineer, upon which date a six months' period of maintenance is to start and the contractor is to be entitled to a certificate for 95% of the value of the work properly executed and the remaining 5% on the expiration of the maintenance period, but contains no provision for a final certificate or final acceptance at the expiration of the maintenance period;
- (d) contains provisions (Condition 9(ii) and (iii)) requiring the Contractor to make good, when directed, defects appearing during the maintenance period and in default empowering the Engineer to make them good, thereby

clearly indicating that there may be defects for which the Contractor is to be liable after the acceptance and taking over of the buildings by the Council and the issue of the certificate for payment of 95%, and, accordingly, that taking over by the Council is not conclusive as to the absence of defects for which the Contractor is liable:

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- contains no express provision limiting the ordinary right of the Council to sue for damages for bad materials or workmanship after the expiry of the maintenance period;
- contains no provision such as that in the Bateman case expressly conferring on the building owner a right to sue limited to the maintenance period, thereby implying that there was no such right beyond that period;
- contains a provision (Condition 9(iv)) which appears to contemplate that claims in respect of defects may be made after the full amount due to the Contractor has been paid on the expiry of the maintenance period;
- (h) contains a provision (Condition 16) to the effect that no payment certificate is of itself to be considered conclusive so as to relieve the Contractor of his liability to make good all defects. A payment certificate for 95% is to be issued on satisfactory completion, and I find it very difficult to believe that the Council would have inserted an express provision to the effect that this should not relieve the Contractor of liability for defects, if it was intended that he should have already been relieved, or be relieved from such liability by the letter of acceptance which would ordinarily precede or accompany the certificate for payment of 95%.
- I think that all these matters indicate that the letters of acceptance by the City Engineer and the taking over by the Council of the eleven blocks were not conclusive so as to prevent the Council exercising any rights which they might have to sue for damages for defects arising from the substandard work or materials, notwithstanding that such defects might appear and suit might be brought after

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Judgment, 10th December 1958 continued. the expiration of the maintenance period, and, upon the construction of this contract, I so hold.

Neither, as Roche J. said in the Newton Abbot case supra, would the clause which allowed the retention of part of the contract price for a certain time interfere with the right to claim damages for defects discovered after that time. Nor would Condition 9(ii) have this effect: Robins v. Goddard (1905) 1 K.B. 294, 303. Marsden v. Sharp, 47 T.L.R. 549 is distinguishable as, in that case, the contract contained express words limiting claims to defects appearing within a five year period.

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Mr. Stewart Brown (if I understood him correctly on this point) submitted that waiver implied a new contract and that in the case of such corporations (e.g. the Council) as can only execute contracts pursuant to a resolution or by-law no parol or implied contract can be proved: the only binding form of new contract is one executed in pursuance of section 41(2) of the Municipalities Ordinance. I think that this, though rather technical, is correct: Halsbury 3rd edn. Vol. 3 But this would not prevent a written or p. 478. oral waiver by an agent not under seal binding a corporation, if the contract provided for this and the agent acted in accordance with the contract. In holding that the letters of acceptance by the Engineer did not amount to waiver binding the

I have held that the letters of acceptance of the City Engineer in respect of the eleven blocks were not final or conclusive or a waiver of the Council's right to sue for defects. Clearly, having regard to Condition 16, the 95% payment certificates were not conclusive or a waiver. A fortiori the interim payment certificates issued in respect of the other six blocks were not conclusive or a waiver. I have also indicated my opinion that the Architect and the Clerk of Works had no actual authority from the Council to accept orally from time to time sub-standard work and materials. The only authority under the contract documents to sanction deviations from the specified work and materials was that given to the City Engineer himself and writing was required. He was a delegate and could not, I think, delegate that

Council, I have depended on the construction of

the contract and not on this argument.

power; but if he could, he certainly could not extend the authority so as to allow the Architect or Clerk of Works to sanction orally what he, the Engineer, could only sanction in writing. There is no evidence and no finding that the contract was ever varied in this respect or that the powers of the Engineer or the Architect were ever extended by the Council.

These findings deal with actual authority. The question of estensible authority must now be considered. The learned Judge has said that there was evidence that the standard was deliberately relaxed on account of difficulties arising from the Emergency and anxiety that the work should not be delayed. The Judge has not, I think, made a definite finding that they were relaxed by the Council or by the City Engineer; but has found that they were relaxed orally by the Architect, Mr. Tanner, and the Clerk of Works. In any event, the learned Judge did not apply this to matters which amounted to variations from the specification. In regard to those he says:

"The position is more difficult as regards work which amounts to a variation from the terms of the Specification. This was permitted, or in some cases, directed, by the Architect for the same reasons, but as I have said, under the contract variations were required to be in writing, and to be authorised by the City Engineer personally. Nevertheless in view of the conflict between the provisions of the contract and the General Conditions, and of the fact that the general conduct of the contract was left in the hands of the Architect, I consider that the Architect was held out as having authority to waive strict compliance with details of the specifications, and that such waiver by the Architect is therefore binding on the Council."

This passage the appellant strongly challenged. There is some conflict (resolved, however, by Clause 4 of the Deed) between Clause 2 of the Deed and General Condition No.1 as to the authority of the Architect to direct or approve deviations from the provisions of the contract; but there is no conflict as to the provisions requiring a direction or approval involving any deviation from any of the provisions of the contract to be in writing,

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and, with respect, it is difficult to see how the fact that the general conduct of the contract was left in the hands of the Architect would amount to a waiver of this express provision of the agreement between the parties. To leave the general conduct of the contract in the hands of the Architect is in no way inconsistent with the provision requiring written permission of the City Engineer for departures from the specification. It is true that the learned Judge refers to "details" of the specification and it may well be that the Architect had some discretion as to those; but it could hardly be suggested that this would extend, e.g. to authority to weaken seriously the cement or mortar mix or to sanction a deviation from the specification in respect of the hardcore filling which would inevitably cause settlement and cracking of the floors.

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The section of the Indian Contract Act which in Kenya governs "holding out" and the ostensible authority of agents is section 237:

"237. When an agent has, without authority, done acts or incurred obligations to third persons on behalf of his principal, the principal is bound by such acts or obligations if he has by his words or conduct induced such third persons to believe that such acts and obligations were within the scope of the agent's authority."

The question is whether the Council by its words or conduct induced the Contractor to believe that the Architect had authority orally to accept sub-standard work and materials. This is not the ordinary case where the third party is dealing with an agent only and has no, or little, knowledge of the scope of the agent's authority. a case of a contract between the Contractor and the Council in which the limits of the agent's authority are in terms laid down. The Contractor had only to look at the contract to see that only the Engineer himself had power to consent to deviations from any of the provisions of the contract; and, if there was any doubt about what this meant, there could be no doubt about the provision that neither the Engineer himself, nor the Architect, had power to approve work or materials otherwise than in writing. (Clause 2 of the Deed

and Condition 1(ii)). The Contractor must be taken to have had actual notice of this limitation of the Architect's authority. And, in fact, on three occasions when he was asked to deviate from the provisions of the contract and do extra work which would cost him money he applied for and obtained written variation orders. In Pollock and Mulla on the Indian Contract Act 6th edn. at p.269 the learned authors say:

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"With regard to contracts and acts which are not actually authorised, the principal may be bound by them, on the principle of estoppel, if they are within the scope of the agent's ostensible authority; but in no case is he bound by any unauthorised act or transaction with respect to persons having notice that the actual authority is being exceeded."

The rule is the same in English law:

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"Where a principal, in conferring authority upon his agent to act on his behalf, imposes conditions or limitations on its exercise, no act done by the agent in excess of the conditional or limited authority is binding on the principal as regards such persons as have, or ought to have notice of such excess of authority ..." Halsbury 3rd ed. Vol. I p.209, para.477.

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Mr. O'Donovan founded an argument on section 40 of the Municipalities Ordinance (which deals with the validity of acts of officers of the Council notwithstanding defects in appointment) and section 49 (which empowers the Council from time to time to prescribe by resolution the duties of its officers). He said that the City Engineer, the Architect and Clerk of Works were all officers of the Council, the extent of their powers was a matter solely within the knowledge of the Council and there was no evidence of any limitation of their authority: he invoked the omnia praesumuntur rite esse acta maxim and argued that the Contractor was justified in assuming that the Architect and Clerk of Works had been given any authority which they purported to exercise. I disagree. There were the express provisions of Clause 2 of the Deed and Condition 1(i) to show the limits of the authority of the Architect and Clerk of Works and

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Judgment, 10th December 1958 continued. in face of this, the Contractor was not entitled to assume without enquiry that they had some authority in excess of those limits. I cannot agree that the Architect or Clerk of Works either had authority, or was held out as having authority, to waive orally departures from the provisions of the specifications.

For all these reasons, I would answer Issue No. 6 in the negative.

As to Issue No. 7, the particulars of the alleged estoppel pleaded may be summarised as (a) inspection of the works; (b) approval and taking possession thereof after the Contractor had been required to, and had done, repairs and alterations; (c) the issue of interim payment certificates; and (d) thereby inducing the Contractor to believe that the works had been approved so that alterations and repairs would be more expensive than they would have been if objections had been taken and the alterations and repairs effected during the progress of the work or within a reasonable time thereafter.

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As to (a) and (b), it has been pointed out that acceptance and taking possession of the works even with knowledge of defects does not, unless there has been actual waiver of due performance, prevent an employer from showing that the work has not been completely performed: Halsbury 3rd edn. Vol.3 p.454; Hudson 7th edn. p.236 quoted above. As to oral approval from time to time by the Architect or Clerk of Works of departures from the specification, there could be no estoppel if the Contractor knew the extent of their authority and knew that it was being exceeded. He did know, or should, from the terms of his contract, have known, this. As to (c) estoppel could not be founded on the issue of interim payment certificates which are only estimates of what it is safe for the owner to pay the Contractor, and are not conclusive of anything. As to (d), the Contractor was bound to put right defects appearing during the maintenance period (Condition 9(iii)); think that if defects were patent before the commencement of the maintenance period and the Council by their officers knowingly stood by and did not ask for these to be corrected at or before acceptance of the building (when the Contractor was on the site and could have remedied them more

easily and cheaply), thereby causing the Contractor to believe that he had no further liability in respect of these defects, there may be a case for relieving the Contractor of the additional expense (if any) caused by such standing by. The Council had a duty to mitigate damages in respect of defects which were patent or could, with reasonable standards of inspection, have been This is dealt with when the measure discovered. of damages is considered hereafter. Mr.O'Donovan cited <u>Hughes v. Metropolitan Railway Co</u>. (1877) 2 A.C. 439, 448; and Birmingham & District Land Co. v. London and North Western Railway (1889( 40 Ch.D. 268, as authority for the proposition that if A. has contractual rights against B., and has by his conduct induced B. to believe that those rights will not be enforced, A. will not be allowed subsequently to enforce those rights or at least will not be allowed to do so without restoring B. to his former position. I do not think, however, that that principle is wholly applicable to the facts of the present case. It could, in any event, apply only to the eleven blocks and to defects which were patent when they were taken over. As has been pointed out, the contract provided for the Contractor to make good defects appearing during the maintenance period and he cannot, or should not, have been induced merely by directions to do some repairs and approval and acceptance of the blocks to believe that those rights or the right of the Council to sue for defects appearing after the commencement of the maintenance period would not be enforced. I revert to this when the question of mitigation of damages is considered. With this reservation I would answer Issue No.7 in the negative.

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Issue No.8 will be dealt with later.

As to Issues 9 and 10, I agree with the findings of the learned Judge and would award the Contractor Shs.78,850/- on this head. The contract contains power in the City Engineer to order extras and his orders in so far as they were given in accordance with the contract, are binding on the Council: Halsbury 3rd edn. Vol. 3 p.478 paragraph 929 and cases there cited.

I come now to issue No.8 - damages - which is, in my opinion, the most difficult part of the case. Generally speaking, the measure of damages for

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failure to carry out a building contract in accordance with the specification is the difference between the value of the buildings as they ought to have been and as they were left by the contractor, and this difference is usually calculated by the cost of making the defects good. Newton Abbot Development Co. v. Stockman supra. Hoenig v. It is to be noted that the diminu-Isaacs supra. tion in the value of the works due to the existence of the defects is the measure of damages envisaged by paragraph (iv) of General Condition 9 for 10 defects to which that paragraph applies. of the buildings as completed by the Contractor was estimated by Mr. Wevill at p.414 of the Record on a comparative maintenance basis, at £35,000 to Deducting £40,000 from the contract £40,000. figure of £85,000 (though in fact Mr. Wevill valued the buildings if finished according to the specification at a higher figure than the contract 20 price) the difference between the value of the buildings as they were left by the Contractor, and as they ought to have been would, on this basis, be £45,000. The Council, however, is not now claiming that amount. The Schedule of Claims now put in by the Council is based on the estimated cost of making defects good and totals Shs. 527, 540/90 or approximately £26,370. This is more favourable to the Contractor than Mr. Wevill's estimate of the difference in the value worked out on comparative costs of maintenance. I will, therefore, 30 discard any other basis of calculation and will assess the diminution in value between the buildings as they were left by the Contractor and as they should have been by calculating the cost of making good the defects.

I have already indicated my opinion that the right of the Council to sue for defects is not limited (as the learned Judge held in regard to the eleven blocks taken over) to defects appearing during the maintenance period. (See e.g. Newton Abbot Development Co. v. Stockman Bros. supra).

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Claims for damages now made by the Council are summarised under six headings:

- I. Foundations and Foundation Walling.
- II. Floors and Hardcore fill underneath.
- III. Superstructure Walling, Door frames, etc. Damp course.

IV. Joinery - Hinges.

V. Loss of Rent.

of Works."

VI. Cost of Survey and Report.

As to <u>I</u> - <u>Foundations</u> and <u>Foundation Walling</u>, the findings of the learned Judge are:

"I find that there was a proportion of this concrete which was not up to specification or was badly mixed and therefore unduly weak and that the Architect and Clerk of Works were not aware of the fact that this weak concrete had gone into the buildings."

"My finding is that a proportion of the cement used" (i.e. in the foundation walling) "was not up to specification or was badly mixed or laid and that this was not known to the Architect or Clerk

The learned Judge held that the Council could only recover, as regards the eleven blocks taken over, for defects discovered within the maintenance Being unable to find evidence as to the extent of the defects discovered within the maintenance period, he was reluctantly unable to assess a figure for damages. Having held that the Council's right to recover is not limited to the defects discovered within the maintenance period, I am not under the same disability. regards the six blocks not taken over, the learned Judge accepted Mr. Wevill's report and awarded 6/17ths of the whole sum (Shs. 38, 967/20) assessed by Mr. Wevill for excavation, underpinning, raking out joints and repointing. The bulk of this was for excavating to expose the external face. learned Judge awarded 6/17ths of the whole assessment, notwithstanding that he had only found that a proportion of the concrete and cement was defective. He may reasonably have considered that the cost of excavating to discover what proportion was defective would in any event have to be allowed and that the cost of testing each joint to find out which were defective would be likely to amount to as much as, or more than, the cost of raking them all out and replacing with new mortar. I do not

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propose to disturb this finding, except to make it apply to seventeen blocks instead of to six, that is to say I would allow the whole sum of Shs. 38,967/20 plus Shs.9,741/80 extra for work done by contract i.e. Shs. 48,708/-. I do not think that the Council is bound to do the remedial work departmentally or to recover damages on the basis that it will be so done. There is no evidence that their departmental officers and labour are or could be made available for this work. I suppose that the Council is entitled, instead of doing the work, to accept inferior buildings with compensation. If, however, the remedial work is actually done, I would allow a further Shs. 10,000/-(as estimated by Mr. Wevill) for pumping and baling to keep the foundations clear of water during the work.

As to II - Floors and Hardcore fill underneath: The Council claims the whole cost of hacking up all floors, digging out filling, filling back 20 with hardcore in 6" layers and ramming and relaying concrete floors and screed to a total of Shs. 309,639/10 plus Shs.77,409/80 if the work is done by contract.

The Learned Judge found (a) that the absence of small filling between the larger boulders was not a failure to comply with the specification or drawings; that hardcore filling without such small material was unlikely to be satisfactory, but that that appeared to have been the provision of the specification, accepted as such by Mr. Tanner; (b) that ramming of a sort was undertaken but that ramming would not be very effective in the absence of small material; (c) that the boulders put in were larger than would go into 6" layers and that there had been a breach of the specification in this respect; but (d) that both Mr. Tanner and Mr. Stone saw the hardcore filling which was being put in and approved both the type of stone used and the method of filling.

As to the concrete floors on top of the fill, the learned Judge found that a proportion of the concrete was either not of the correct mix or not properly mixed or laid and that the defect was unknown to the Clerk of Works and the Architect.

With regard to the hardcore fill, Mr. Stewart Brown did not suggest that the Contractor was under 10

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an obligation to import small rubble, but he did argue that if the stone had been broken smaller so as to go into 6" layers and the broken fragments had been put in, there would have been enough small stone to enable much better consolidation in layers not exceeding 6" and the ramming would have been much more effective. This would appear to be reasonable. There was nothing, however, in the Specification (except perhaps paragraph 2 of the 1st Part of the Specification) binding the Contractor to break up the stone on the spot and put in the resulting fragments, though this was the method adopted and one of the Contract Drawings shows small filling between the stones.

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Mr. O'Donovan argued that the Council had not proved their damages because they had not proved how much, if at all, a better result would have been achieved if the large boulders had been broken down and the resulting fragments put in. Moreover, he contended that the Council were under a duty to mitigate damages and that they could not recover damages resulting from a failure to take reasonable steps at the time to have this done. He contended that they could have insisted on the blocks being broken down to the proper size when it would have been easy and cheap to do this, and that they cannot recover the greatly enhanced cost of taking up all the floors to do the work Mr. O'Donovan relied on Trent and Humber Co., ex parte Cambrian Steam Packet Co. (1868) 6 Eq. 396. In that case the Trent Co. had built a ship for the Cambrian Co. which was defective. The defect was not discovered until nearly a year after the delivery of the ship and after the ship had returned from a voyage. Expensive repairs were then necessary. It was held that the defect could easily have been discovered by the representatives of the Cambrian Co. at or before the day that the ship was delivered and that, in those circumstances, the maximum amount recoverable was the amount which it would have cost to rectify the defect at the date of delivery. Mr. O'Donovan argued that, by analogy, the most the Council could recover was the amount which it would have cost to rectify the hardcore fillings at the times that they were put in.

Mr. Stewart-Brown in reply contended that, though the Council could have demanded rectification of the hardcore fillings at the time, the

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No.25
Judgment,
10th December
1958 -

continued.

fact that they had not done so did not affect their right to damages: a building owner is not under an obligation to exercise an optional remedy and does not lose his right to damages if he does not do so (Robins v. Goddard (1905) 1 K.B.294, 303). Moreover, Mr. Stewart-Brown pointed out, in the Trent case the Cambrian Company was held to be entitled to damages at the date of completion, and in the present case the damages had not increased since the date of completion: the floors had already been put down.

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I do not think that a building owner loses his right to damages if he does not exercise an optional power to have the work rectified when he discovers or ought to have discovered the defects; but it may be that his damages will be calculated at the date at which he ought to have acted to mitigate them, and that if he chooses to lie by and do nothing, he may not be entitled to recover the greatly enhanced cost of remedying the defects When the actual amount of damage has been affected by the conduct of the plaintiff or his agents, if that conduct was unreasonable, damages may be diminished on that account: Wilson v. Hicks (1857) 26 L.J. (N.S.) 242. A party is bound to act not only in his own interests, but in the interests of the party who would have to pay the damages, and to keep down the damages so far as it is reasonable and proper, by acting reasonably in Smailes & Son v. Hans Dessen & Co. the matter: (1906) 94 L.T. (N.S.) 492,493. The Trent case (supra) differs from the present case in that it was not shown that the Cambrian Co. had any representative on the job supervising the work or that the defect was known to any officer of the Cambrian Co. before completion. In fact it was not discovered until nearly a year after completion. a date before completion had been established at which an officer of the Cambrian Co. had discovered the defect, the damages might have been related to that date and not the completion date.

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As I have said, generally speaking, the measure of damages for failure to carry out a building contract in accordance with the specification is the difference between the value of the buildings as they ought to have been and as they were in fact, and is normally measured by the cost of making the buildings good. (I omit, for the present, consideration of loss of rent, profits,

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etc.). But the cost of making good is not always For instance, as Mr. Stewart-Brown the measure. conceded, the measure of damages for building a house 30 feet, instead of 35 feet, back from a road would not be the cost of demolishing and rebuilding the house, certainly not if the owner could have discovered what was being done but did not do so, or did so and made no objection, until the house had been completed. He could not then recover the whole cost of making good as at the date of completion (I have assumed in this example that no building by-law was contravened). larly, I think that here the Council or its agent the City Engineer could and should have known the type of hardcore and the method of filling which Mr. Tanner knew. was being used. It is in evidence that Mr. Tanner was not agreeable to incurring the extra expense of small rubble and took no notice when the practical difficulty occasioned by attempting to ram large stones without the voids being filled was explained to him. Mr. Tanner should have reported to the City Engineer. The fill should then have been corrected and the damages mitigated. There is no evidence of what it would have cost at that stage (a) for the Contractor to break down the fill to the specified size and (b) for small rubble, if still required, to be put in; but clearly the cost would have been much less than the cost of hacking up the floors, digging out the fill, filling back and relaying the floors which is now said to be the only satisfactory remedy. No doubt the Architect was at fault, and, perhaps the City Engineer also; but the Contractor was by no means free from blame. The breach of contract was primarily his. He put in, in breach of paragraph 26 of the Specification, stone, not approved in writing, of a size which could not go into layers not exceeding 6 inches and could not be effectively rammed. He could have avoided this trouble if he had observed the terms of the Specification or, when approached by the Clerk of Works to make a good job of the filling by adding small rubble he had not said that he was not going to, as it was not in the Specification. (See the evidence of Mr. Stone, whose evidence the learned Judge accepted, at page Even if the Contractor was not under an 290). express obligation to put in small rubble, he must have known that boulders with little or no small filling in the voids and no proper compaction would cause uneven settlement and cracking of the

In the Court of Appeal for Eastern Africa

No. 25

Judgment, 10th December 1958 continued.

No.25
Judgment,
10th December
1958 continued.

floor and would not be sound building construction practice within paragraph 2 of the Specification. He should have obtained a written direction and could, if he contended that small filling was outside the Specification, have asked to recover the cost of small filling as an extra. In any event, he was bound by clause 26 of the Specification read with General Condition 1(ii) to get the type of filling which he was using approved in writing and this he did not do. It seems to me that both the parties acted unreasonably and were about equally to blame for the work going forward with defective hardcore filling and for the results which flowed therefrom.

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As to the concrete floors, the learned Judge found that a proportion of the concrete in the floors was (unknown to the Architect and Clerk of Works) not of the correct mix or not properly mixed or laid; but he has not said what proportion. The learned Judge said that he found it impossible 20 to reach any estimate as to the figure of damages attributable to faulty concrete in the floors. If damage has been proved, however, and there is any evidence upon which an assessment of it can be made, the Court must not be deterred by difficulty in assessing it. "Difficulty in assessing the damages is no reason for refusing damages, or for awarding only nominal damages:" Hayne on Damages, llth edn. p.610; Chaplin v. Hicks (1911) 2 K.B. 786 (C.A.). I consider that there is some evidence 30 upon which an assessment of damages under Head II above could have been based. The facts that precision cannot be arrived at and that certainty is impossible are no grounds for not making an assessment: Chaplin v. Hicks supra at p. 792. It is stated in Mr. Wevill's Report, which the learned Judge seems to have accepted in those instances where he gave damages, that all the floors have cracked, leading, as Mr. Wevill says, to the reasonable assumption that the type of filling which was exposed where the floors were opened up is similar throughout and that the cause of cracking, irrespective of possible weakness in the concrete, lies Mr. Wevill's orel evidence and in the filling. that of Mr. Stone support that inference. Wevill stated further that no matter what repairs were made to the floors themselves, no permanent cure could be effected until they were all taken up, the filling removed, all black cotton soil dug 50 out and new filling which conforms to the Specification done and the floors re-laid. The Council

would, on the basis which I have stated above and apart from any question of mitigation of damages, be entitled to the cost of making the buildings good including the cost of having new filling put in of a size which conforms to the Specification. For the purpose of rectifying the filling underneath, the floors would have to be removed and replaced. Mr. Wevill estimated the cost of hacking up the floors, digging out the fill, back-filling and making new floors at Shs. 387,048/90 if the work were done by contract. I think that the damages under this head should be assessed at that sum less whatever proportion ought to be deducted by reason of the failure of the servants of the Council to act reasonably in mitigating the It is impossible, as it was in Chaplin damages. v. Hicks supra, to make an accurate assessment, but damage is proved and the Court must make some assessment or order an inquiry as to damages. have considered whether an inquiry as to damages should be ordered, but that would only involve further protracted and expensive litigation, and it is probable that no precise assessment could be Accordingly, I would allow Shs. 387, 048/90, achieved. diminished by the proportion which the Council ought to bear by reason of their servants' part in allowing the work to go forward with defective hardcore filling, which, having regard to the figures and all the circumstances, I assess at fifty per cent. That is to say, I would allow the Council Shs.193,524/45 on this head.

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As to <u>III - Superstructure Walling</u>. The finding of the learned Judge is:

"I have reached the conclusion that the complaint is justified with regard to some proportion of the cement mortar and that this defect was not known to the Architect or Clerk of Works."

The learned Judge allowed 6/17ths of the sum (Shs.18,573/20) assessed by Mr. Wevill for external rectification, i.e. Shs.6,564/-. This was because the learned Judge held that the Council could only recover in respect of six of the seventeen blocks. For the reasons already given, I think that the Council can recover in respect of all seventeen blocks, and that, accordingly, the whole sum, Shs.18,573/20, should be allowed for external treatment, plus a further Shs.4,643/30 the cost

In the Court of Appeal for Eastern Africa

No.25

Judgment, 10th December 1958 continued.

No. 25

Judgment, 10th December 1958 continued. of having the work done by contract, making a total of Shs.23,216/50. A similar sum, i.e. Shs.23,216/50, will be recoverable in respect of similar internal treatment. Total Shs.46,433/-.

### As to Door Frames and Windows:

The findings of the learned Judge are:

"It is further complained that door frames were not properly set or fixed. Once again there seemed to be some divergence of evidence on this subject. It appears to me that the Architect and Clerk of Works were aware of what was being done in general though in particular cases it may be that the door frames were badly set without this being noticed at the time. This would seem to be a matter which it should be easy to pick up either during inspection of the buildings prior to taking over or during the maintenance period. Nevertheless it probably does constitute a breach of contract for which the Contractor is responsible."

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"It is complained that door and window frames were not fixed with metal cramps, that door hinges were not as specified and were fixed with screws without any bolts. The evidence indicates that there was not a compliance with the specification in that screws and not bolts were used but it is also clear in the evidence that the variations were known to and accepted by the Architect and Clerk of Works."

The learned Judge allowed nothing on this head because he had held that the Council could not recover for patent defects. If, however, I am correct, the Council is entitled to recover on It is not shown that the cost of this head. taking out and replacing defective door frames, shutters and louvres is more now than it would have been had each defective door frame, etc. been required to be replaced immediately after it was 40 put in, except that the Contractor has now left the site. I cannot allow for this. He should not have left defective work behind him. Council are entitled to the cost of making these

matters good, which, following Mr. Wevill's figures in Exhibit K., I would assess at Shs. 8,430/- plus 25% for work done by contract, i.e. Shs.10,537/50.

In the Court of Appeal for Eastern Africa

Damp Course. The learned Judge allowed 6/17ths of Shs.500/- for defects in the damp course. On my findings the whole of the Shs.500/- should be

No.25

Judgment, 10th December 1958 continued.

As to IV - Joinery - Hinges.

One of the findings is quoted above. Another is:

"It appeared that types of spring closing device were used on these" (the Ablution) "doors and that as a general rule the doors were not set so as to close on their own account. This is an apparent failure to comply with the Specification but is not a matter which can be concealed. Both the Architect and Clerk of Works must have been aware of what was done."

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allowed.

I think that the same reasoning applies as for door frames and windows and that the Council are entitled to recover the cost estimated in Exhibit K for carrying out this work, namely Shs. 7,252/50.

As to <u>V</u> - <u>Loss of Rent</u>. The claim on this head is now reduced to Shs.10,967/- (See Schedule of Claims p.4). The learned Judge did not feel able to award anything on this head because the Council had not succeeded in establishing their claim in respect of the bulk of the alleged defects. I think that a claim for loss of rent should only be allowed if the loss is in fact incurred. Accordingly, if the Council does the remedial work indicated under paragraphs I to IV above or any of it and in so doing the buildings concerned have to be evacuated so that rents are lost, the actual loss so incurred will be recoverable by the Council as damages provided the remedial work is put in hand and completed with reasonable despatch.

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As to VI - Cost of Survey and Report. The Council claimed Shs.9,881/- on this head. The learned Judge on the basis of his findings allowed

No.25

Judgment, 10th December 1958 continued. Shs.2,000/-. On the basis of my findings I would allow Shs.6,000/-.

To summarise, I would allow damages under Issue 8 as follows:

- I. Foundations and Foundation Walling.
  Shs.48,708/-; plus, if the remedial work is actually done, Shs.10,000/- for pumping and baling.
- II. Floors and Hardcore fill underneath. Shs.193,524/45.

III. Superstructure Walling. Shs. 46, 433/-.

Door Frames and Windows. Shs.10,537/50.

Damp Course. Shs. 500/-.

- IV. <u>Joinery Hinges</u>. Shs. 7, 252/50.
  - V. Loss of Rent.

The Council may recover the amount of rent actually lost by reason of doing the remedial work mentioned or any of it.

VI. Cost of Survey and Report. Shs.6,000/-.

As to the retention money, the Contractor is not entitled to any of it until he has satisfactorily completed the work, which he has certainly not done to date. Only if and when the Contractor has discharged his liabilities to the Council enumerated above, so that it can be said that the defects for which the Contractor is liable have been remedied or damages paid in lieu, will he be entitled to receive payment of the retention moneys and of the sum of Shs.50,000/- deposited by way of security. He is not yet entitled to either.

I would allow the appeal and set aside the Decree dated 6th September, 1957, and substitute a Decree to the effect (1) that subject to paragraph 2 of the Decree, the Council do pay to the

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Contractor, in Civil Case No.170 of 1956, the sum of Shs.70,850/- in respect of extras; and (2) a declaration that the Council is entitled in Civil Case No.1314 of 1956 to the damages set out under Heads I to VI above and an order that the Contractor do pay the same accordingly. As to the sums awarded for pumping and baling under Head I and for loss of rent under Head V, judgment may be signed for these upon proof to the satisfaction of the Registrar of this Court (subject to reference to the Court) that the work has been done. The amounts payable by and to each party under paragraphs (1) and (2) may be set off. The Contractor will also be entitled to set off the retention moneys and the Shs.50,000/- deposited by way of security. The Decree had better be settled in Chambers and the parties must have liberty to apply from time to time as the Decree is worked out.

In the Court of Appeal for Eastern Africa

No.25
Judgment,

10th December 1958 continued.

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As to costs, having considered the issues upon which the Council has succeeded and the extent to which they have been successful financially, and following the principle in Cinema Press Ltd. v. Pictures and Pleasures Ltd. (1945) 1 K.B. at p. 364, I would order that two-thirds of the costs of both suits below and of the appeal be taxed and paid by the Contractor to the Council. There should be a certificate for two counsel on each side on the appeal.

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K.K. O'CONNOR. PRESIDENT.

### JUDGMENT OF GOULD J.A.

I have had the opportunity of considering the judgment of the learned President in this appeal. I am in full agreement with it both as to reasoning and conclusions and I have nothing to add.

T.J. GOULD.
JUSTICE OF APPEAL.

### JUDGMENT OF CORRIE AG. J.A.

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I also agree.

O.C.K. CORRIE.
AG. JUSTICE OF APPEAL.

Delivered by the Registrar at Nairobi, on Wednesday the 10th day of December, 1958.

No.26

### ORDER

No.26 Order, 10th December

1958.

IN HER MAJESTY'S COURT OF APPEAL FOR EASTERN AFRICA AT NAIROBI.

# CIVIL APPEAL NO. 83 of 1957

BETWEEN

CITY COUNCIL OF NAIROBI .. APPELLANT

and

ATA UL HAQ

.. RESPONDENT

(Appeal from a Judgment and Decree of the Supreme Court of Kenya at Nairobi (Mr. Justice Forbes) dated the 6th day of September, 1957, in

Civil Case No.170 of 1956

Between

Ata Ul Haq

Plaintiff

and

City Council of Nairobi

Defendant

and

Civil Case No.1314 of 1956

Between

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City Council of Nairobi

Plaintiff

and

Ata Ul Haq

Defendant)

In Court

this 10th day of December 1958.

Before the Honourable the President (Sir Kenneth C'Connor)

the Honourable Mr. Justice Could, a Justice of Appeal

and the Honourable Sir Owen Corrie, a Justice of Appeal (Acting).

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#### ORDER

THIS APPEAL coming on for hearing on the 23rd, 24th, 25th and 26th days of September, 1958 AND UPON HEARING Stewart Brown, Esquire of Her Majesty's Counsel and J.A. Mackie Robertson Esquire of Counsel

for the Appellant and B. O'Donovan Esquire and S.R. Cockar Esquire of Counsel for the Respondent it was ordered that this appeal do stand for judgment and upon the same coming for judgment this day

In the Court of Appeal for Eastern Africa

No.26

Order,

10th December 1958 - continued.

### (1) IT IS ORDERED

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That this appeal be and is hereby allowed, and the Decree of the Supreme Court of Kenya dated the 6th day of September, 1957, be and is hereby set aside;

### (2) AND IT IS ORDERED

That the Appellant, then Defendant, do pay to the Respondent, then Plaintiff, in Supreme Court Civil Case No.170/56 the sum of Shs. 70,850/- in respect of Extras;

### (3) AND IT IS DECLARED

That the Appellant then Plaintiff is entitled in Supreme Court Civil Case No.1314/56 to the damages following:-

20 I. For Foundations and Foundation Walling

Shs.48,708.00

Plus: For pumping and baling if remedial work carried out Shs.10,000

II. For Floors and Hardcore fill undermeath

193,524.45

III. For Superstructure Walling

46,433.00

Door Frames and Windows

1.0,537.50

Damp Course

500.00

IV. For Joinery -- Hinges

7,252.50

- V. Loss of Rent the actual loss incurred by evacuation of buildings for carrying out remedial work, if put in hand and completed with reasonable despatch
- VI. For Cost of Survey and Report

6,000.00

Shs.312,955.45

No. 26

Order.

10th December 1958 - continued.

#### AND ACCORDINGLY it is

ORDERED that the respondent (then Defendant) do pay to the Appellant (then Plaintiff) in Supreme Court Civil Case No.1314/56 the said sum of Shs. 312,955/45;

- (4) AND IT IS FURTHER DECLARED that against the said sum of Shs. 312, 955/45 payable to the Appellant under (3) above the Respondent may set off the sum of Shs. 70, 850/- payable to him under (2) above, the retention moneys of Shs. 140,018/- and deposit by way of security of Shs. 50,000/-.
- (5) AND IT IS FURTHER ORDERED:

That the Respondent do pay to the Appellant Two thirds of its costs of both suits below and this appeal to be taxed and certified by the Taxing Masters of the Court below and this Court respectively with allowance for two counsel on each side in this appeal.

(6) AND IT IS FURTHER DECLARED:

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That the parties be at liberty to apply from time to time as the Decree is worked cut.

GIVEN under my hand and the Seal of the Court at Nairobi, this 10th day of December, 1958.

F. HARLAND.

RECISTRAR,

H.M. COURT OF APPEAL FOR EASTERN AFRICA.

ISSUED on this 19th day of August, 1959.

#### No. 27

# ORDER GRANTING FINAL LEAVE TO APPEAL

IN HER MAJESTY'S COURT OF APPEAL FOR EASTERN AFRICA AT NAIROBI

### CIVIL APPLICATION NO. 3 of 1959

(In the matter of an intended appeal to Her Majesty in Council)

#### BETWEEN

ATA UL HAQ

APPLICANT

and

CITY COUNCIL OF NAIROBI

RESPONDENT

(Intended appeal from a judgment and order of Her Majesty's Court of Appeal for Eastern Africa at Nairobi dated 10th December 1958 in

Civil Appeal No. 83 of 1957

Between

City Council of Nairobi

Appellant

and

Ata Ul Haq

Respondent)

In Chambers

this 16th day of October 1959.

Before the Honourable Mr. Justice Windham, a Justice of Appeal.

### ORDER

UPON the application presented to this Court on the 14th day of October, 1959, by Counsel for above named Applicant for final leave to appeal to Her Majesty in Council AND UPON READING the Affidavit of Sheikh Mohamed Akram of Nairobi in the Colony of Kenya advocate sworn on the 13th day of October, 1959, in support thereof AND UPON HEARING Counsel for the Applicant and Counsel for the Respondent THIS COURT DOTH ORDER that the application for final leave to appeal to Her Majesty in Council be and is hereby granted AND DOTH DIRECT that the record, including this Order, be despatched to England within 14 days from the date hereof AND DOTH FURTHER ORDER that the costs

In the Court of Appeal for Eastern Africa

No. 27

Order granting Final Leave to Appeal, 16th October

1959.

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of this application do abide the result of the Appeal.

No.27

GIVEN under my hand and the Seal of the Court at Nairobi this 16th day of October, 1959.

Order granting Final Leave to Appeal,

F. HARLAND. REGISTRAR.

16th October 1959 continued.

ISSUED this 16th day of October, 1959.

#### EXHIBIT 2.

### LETTER, CITY ENGINEER TO ATA UL HAQ.

6th December, 1954.

Mr. Ata-Ul-Hag, P.O. Box 2809, Nairobi.

Dear Sir,

# Doonholm Neighbourhood Stage 1, Part B, Contract N.73

The defects on the list which was handed to you by the Clerk of Works following the first take over inspection, have not been attended to satisfactorily and no proper attempt has been made to do so. I require you immediately to attend to these defects, in particular the doors, tiles and floors. The inspection on the 2nd December revealed that only one door mentioned in the list had been repaired. The list of defects will be checked before the buildings are taken over.

In future all items listed by the Clerk of Works must be repaired and the Clerk of Works is not to be informed that this has been done, until it has in fact been done.

Yours faithfully, Sd. ??? CITY ENGINEER.

### EXHIBIT 3.

# LETTER, CITY ENGINEER TO ATA UL HAQ

4th November, 1954.

30 Ata-Ul-Haq, P.O. Box 2809, Nairobi.

Dear Sir,

### Doonholm Neighbourhood Stage 1, Part B, Contract N.73

I have to inform you that the following units were accepted by Council on 1st November under the above contract ...

#### Exhibits

2.

Letter, City Engineer to Ata Ul Haq. 6th December, 1954.

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3.

Letter, City Engineer to Ata Ul Haq. 4th November, 1954.

Exhibits 3.	Block No. Part 29	No.of Rooms	Room No. 349 - 352	<u>Value</u> Shs.13,200/-	
Letter, City Engineer to Ata Ul Haq.	" 28	l Ablution Unit	Varma vait	5,000/-	
4th November,	Yours faithfully,				
1954	Sd. ???				
- continued.			CITY ENGI	NEER	
4. Letter, City	Tært	EXHIB		L HAQ	
Engineer to	18th December, 1954.				
Ata Ul Haq. 18th December, 1954.	Messrs, Ata-Ul-Haq, P.O. Box 2809, NAIROBI.				10
	Dear Sirs,				
	Doonholm Neighbourhood				
	Stage 1, Part B, Contract No.73.				
	I have to inform you that the following buildings have been accepted by Council. The Clerk of Works informs me that the timber used for the joinery appears unsatisfactory and will in many instances have to be replaced at the end of the maintenance period. I require that the standard of joinery be improved in future buildings before they can be taken over:-				20
		Room Nos.	No.of Rooms	Est. Cost	
	28 (Part)		20 + 2 abl.		
	29 (Part)	729 <b>-</b> 748	units " 178,200/	" 178,200/-	
	Total No.			ie " 255,200/-	
	Site clearance has not been completed.				
	Yours faithfully,				30
			Sd. ???	• •	
	Mr. Ha Clerk	annington, atersley, of Works, sect i/c Africa	CITY ENGIN		

### EXHIBIT 5.

# LETTER, ATA UL HAQ TO CITY ENGINEER

P.O. Box 2809, NAIROBI. 14th January, 1955

The City Engineer. P.O. Box 651. NAIROBI.

Dear Sir.

#### 10 Doonholm Neighbourhood Stage 1, Part B, Contract No.73

I refer to your letter CE.9369/T/DH/9/N/73 dated 18th December 1954, and do not understand the statement that the Clerk of Works has informed you that the timber used for the joinery appears unsatisfactory and will, in many instances, have to be replaced at the end of the maintenance period.

I am very concerned by this statement, particularly in view of the fact that none of your representatives at the time of the inspection before taking over, saw fit to raise this matter in these terms. During previous inspections a defects list was handed to me by the Clerk of Works and all the defects noted in this list were completed before the final inspection.

The specification for timber to be used for joinery states that "it shall be approved selected quality cedar free from all defects". This quality is being used for the manufacture of all joinery work, and in the event of any defects being noticed which fall within the terms of the specification, I have never refused to make good or replace.

I feel that any general comment on the quality of the joinery timber could well have been made during the period of several weeks when the houses were standing empty and your representatives were not willing to take over because of the lack of progress on the construction of a drain which did not form part of my Contract.

I shall be glad if you will provide me, your early convenience, with a schedule of defects in joinery timber.

Site clearance was completed before the handing over of the houses, and was satisfactory to all concerned at that time. Since then the tenants

#### Exhibits

1955.

Letter, Ata Ul Haq, to City Engineer. 14th January,

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5.

Letter, Ata Ul Haq, to City Engineer.

14th January, 1955 - continued.

6.

Letter,
Ata Ul Haq to
City Engineer.

14th January, 1955.

of the houses have broadcast litter and the construction of a deep sewer across the site has deposited quantities of excavated material and rubble.

Yours faithfully,

ATA-UL-HAQ.

#### EXHIBIT 6.

#### LETTER, ATA UL HAQ TO CITY ENGINEER

P.O. Box 2809, NAIROBI,

14th January, 1955

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The City Engineer, P.O. Box 651, MAIROBI.

Dear Sir,

#### Doonholm Neighbourhood Stage 1, Part B, Contract N. 73.

Since the commencement of this Contract I have not received any variation orders covering the extra operations carried out in blocks of buildings where the foundations are at a greater depth than that specified.

I shall be glad if the Clerk of Works can be instructed to agree measurements already taken by him in my company, so that a variation order covering the whole Contract can be issued at an early date.

Yours faithfully,

ATA-UL-HAQ.

#### EXHIBIT 8.

#### LETTER, ATA UL HAQ TO CITY ENGINEER

P.O. Box 2809,

NAIROBI. 29th June, 1955.

The City Engineer, Nairobi.

Dear Sir.

Doonholm - Neighbourhood Scheme Part 1, Stage B, Contract No. 73.

With reference to the above contract, I wish to bring the following matters to your kind attention.

- I received from the Clerk of Works a Chart Statement dated the 28th June 1955 showing a number of Courses of Stonework in the building Footings (this work is subject to Variation Order). This statement is not correct and to prove it so, I am willing to dig Inspection Holes so the matter can be verified against the chart given to me.
- 2. Blocks 31, 32, 33, 34 on my work have now been completed and occupied since six weeks and I have not yet received a letter stating that these have been taken over.
- I was told to dig Twenty Inspection Holes so that my work could be examined. This was done and the opened work examined by your Architect-in-Charge of the African Housing. This work is covered by the "Condition of Contract", but when I requested for the instructions to be given in writing in accordance with the "Conditions of Contract", this was refused by him.
- I wrote a letter on the 7th April, 1955 requesting a Variation Order to cover the repairs carried out by me on a Building damaged by someone elses lorry on my site. I regret to note that so far I have not received this Variation Order.
- Finally I wish to point out that I have received no payment since last two months against this Contract.

I shall appreciate if you will kindly look into these matters at your earliest convenience.

Thanking you in anticipation.

Yours faithfully, ATA-UL-HAQ.

Exhibits

8.

Letter, Ata Ul Haq to City Engineer.

29th June, 1955.

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9.

Letter, Acting City Engineer to Ata Ul Haq.

8th July, 1955.

#### EXHIBIT 9.

### LETTER, ACTING CITY ENGINEER TO ATA UL HAQ

8th July, 1955.

Mr. Ata-Ul-Haq, P.O. Box 2809, NAIROBI.

Dear Sir,

Ofafa Estate, Stage 1, Part B, Contract N.73.

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Thank you for your letter of the 29th June, 1955.

I will answer the matters to which you refer in their numerical order.

l. I have no objection to you digging inspection holes to prove your claim that the Clerk of Works, Mr. Stone, has recorded them incorrectly. I understand that Mr. Stone's figures are in many cases averages of stone courses below floor concrete. In this case it will be necessary for you to dig a minimum of three holes per block to prove your point. The cost for digging the holes will be payable by:-

orded

- (a) The City Council should Mr. Stone's recorded figures be proved wrong.
- (b) By you, the contractor, if the recorded figures are proved correct.

These holes will be inspected by the African Housing Architect.

- 2. Notification that the Council have accepted 30 these blocks was sent on the 28th June 1955.
- 3. It was Mr. Tanner's request that you should dig twenty inspection holes, and that Mr. Stone should supervise this work. I understand that Mr. Tanner and Mr. Mould inspected these holes, but instructed you to leave them open until samples of mortar from the joints had been taken for chemical tests by the Public Works Department, samples were not taken because you filled the holes in. Mr. Mould wrote to you about this on the 8th June 1955. Samples of mortar will be taken when you expose the walling to check the number of courses, and sent to the Public Works Department, for chemical analysis.

4.	$\operatorname{Th}$	is	matter	is	being	dealt	wi	th, I	have	writ-
ten	to	the	contra	acto	r who	damage	ed	Block	28.	

# 5. Payment certificates for the months, May and June, have been prepared and you should have received them by now.

Yours faithfully,

ACTING CITY ENGINEER.

#### Exhibits

9.

Letter,
Acting City
Engineer to
Ata Ul Haq.
8th July 195

8th July, 1955. - continued.

#### EXHIBIT 10. 10. Particulars of PARTICULARS OF EXTRAS CLAIMED BY ATA UL HAQ. extras claimed Shs. Cts. by Ata Ul Hag. 10 1. Stone masonry in foundation 16,969 sq. ft. @ Shs. 1/50 25,453.00 per sq. ft. 2. Extra excavation of black cotton soil 27,354 cu.ft. @ Shs. -/20 per cu.ft. 5,469.00 3. Extra filling under floor. 6.836.00 27,345 cu.ft. @ -/25 per cu.ft. 4. Provided and fixed flashing to two flue stacks No.188 @ 20 26,696.00 Shs. 142/- each 5. Provided and fixed flashing to one stack No.32 @ Shs.120/- each 3,840.00 6. Provided and fixed flashing to one flue and stack No.24 @ Shs.75/- each 1.800.00 7. Form steps in roof No.4 @ Shs. 338/- each 1,352.00 8. 6" precast concrete drain 827 running ft. @ Shs.5/- per running ft. 4,135.00 9. Extra for removing boundary wall Blocks No.26 and 27 30 415.00 366.00 10. Murrum path to block No.29

11. Dug inspection holes

Shs. 40/- each

@ Shs. 6/- each

12. Children's latrines No.3 @

13. Extra shelves in kitchen No.456

800.00

120.00

2,736.00

Exhibits	Shs. Cts.  14. Latrine Head Plate 4" x 2" 648 running ft. @ Shs.1/50 per						
Particulars of	running ft. 972.00						
extras claimed by Ata Ul Haq continued.	15. 14,150 running ft. plastering 4" wide to concrete slab @ Shs/40 per running ft. 5,660.00						
	16. Extra for repairing damaged wall by somebody else's lorry 270.00						
	17. Extra for line x 1" podo batten including labour and nails, 13,608 running ft. @ -/20 r/ft. 2.721.60 89,641.60	10					
	Management of the control of the con						
11.	EXHIBIT 11						
Letter, City Engineer	LETTER, CITY ENGINEER TO ATA UL HAQ						
to Ata Ul Haq	22nd January, 1955.						
22nd January, 1955.	Mr. Ata-Ul-Haq, I.O. Box 2809, NAIROBI.						
	Dear Sir,						
	Doonholm Neighbourhood Stage 1, Part B, Contract No.73	20					
	I refer to your 4 No. letters dated 14th January, 1955 in connection with the above Contract.						
	Firstly, with regard to the 9" step-downs in the roofs. The Specification (preliminary and General Clause 13) clearly states that 'the Contractor shall furnish the City Engineer when requested with detailed measurements and prices of all work and materials which may be varied or specially ordered from time to time in such a form as will enable the quantity, price per unit and total price to be readily perceived'. In accordance with my letter C.E.9265/T/H/9/N/73 of 9th December, will you please do this?	30					
	Secondly, with regard to the timber used for joinery. Both the Clerk of Works and the Architect i/c African Housing informed you verbally that they considered the timber was not satisfactorily seasoned and that serious shrinkages might well appear. It was not possible to give this opinion to you any	40					

earlier as the joinery was well constructed and the shrinkages only began to appear at the time of taking over. A schedule of defects in the joinery as well as other items will be given you at the end of the Defects Liability Period.

There is no question of you having to clear the site of material left by the sewer contractor or of rubbish from the house occupants. However, a certain amount of further site clearance will have to be done at a later date as your building operations have caused a small amount of rubble etc., to be deposited in the area of some of the buildings that have been taken over.

Thirdly, the Clerk of Works has been instructed to take measurements of the foundation depths and agree them with you. Variation Orders will be issued as soon as this is done.

Fourthly, with regard to your request for extra payment for lime. The Specification states that approved lime shall be used - that is, lime approved by the City Engineer. In this connection it was decided that lime purchased from Messrs. Beales or another similar in quality could be used. The Architect was not aware that you had reverted to Kenya Marble Quarries' lime and in fact this was not authorised by him or by the Clerk of Works. However, in view of your many difficulties with this Contract, I am prepared to approve the use of this latter lime. There is no extra cost involved, since the approval of this lime is merely a relaxation from my original standards.

The delay in obtaining tiles has hindered the progress of your Contract and I am prepared to grant you an extension of 4 No. weeks. The date of completion is therefore 16th May, 1955.

Yours faithfully,

CITY ENGINEER.

c.c. Mr. Tanner.

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#### Exhibits

11.

Letter, City Engineer to Ata Ul Haq. 22nd January, 1955

- continued.

#### EXHIBIT 12.

12.

#### LETTER. CITY ENGINEER TO ATA UL HAQ.

Letter, City Engineer to Ata Ul Hac. 30th August,

1954.

Mr.Ata-Ul-Haq, P.O. Box 2809.

Nairobi.

Dear Sir,

Doonholm Neighbourhood, Stage 1, Part B, Contract N.73.

I would be obliged if you would submit a price 10 for stepping blocks, 9" average step, under the above contract.

This price, which should be stated for step only, will serve as the basis of a Variation Order.

Yours faithfully.

CITY ENGINEER.

13.

EXHIBIT 13.

Letter, Ata Ul Haq to City Engineer. LETTER, ATA UL HAQ TO CITY ENGINEER

9th October, 1954.

P.O. Box 2809, NAIROBI, 9th October, 1954.

30th August, 1954.

The City Engineer, City Council of Nairobi, TOWN HALL. MAIROBI.

Dear Sir.

Re: Doonholm Neighbourhood Stage 1, Part B, Contract N.73.

With reference to your letter No.C.E.7852/MCF/ W/9/N/73 of 30th August 1954 I beg to submit the tender for 9" average step and will charge Shs.238/for each step.

Hoping a favourably reply at your earliest convenience.

> Yours faithfully. Sd. ??? for UTA-UL-HAQ.

30

#### EXHIBIT 14.

#### LETTER, T. L. STONE TO ATA UL HAQ

Clerk of Works Office, Doonholm Road, Neighbourhood Site.

13.10.54.

#### Exhibits

14.

Letter, Clerk of Works to Ata Ul Haq.

13th October, 1954.

Messrs. Ata Ul Haq, Contractors, Neighbourhood Site.

#### Steps to Buildings (Part B)

The Architect informs me that you have submitted a price of Shs.238/- (Two hundred and thirty eight) for constructing the steps in the buildings under construction.

Will you please arrange to submit a detail account or build up showing how the figure of Shs. 238/- is made up.

Please treat this as urgent.

(Sgd.) T.L. Stone.

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#### EXHIBIT 1.5.

#### LETTER, ATA UL HAQ TO CITY ENGINEER

P.O. Box 2809, NAIROBI, 20th October, 1954.

The City Engineer, Nairobi City Council, TOWN HALL, NAIROBI.

Dear Sir,

30 With reference to your Clerk of Works! letter of 12th instant I beg to inform you that the amount shown in my tender was made up as under :-

As per tender from Messrs. Ilam
Din & Co., for flashing ... Shs.126.00
One extra Truss including fixing 42.00
Quarry tiles to Gable including
fixing with cement mortar ... 44.00

15.

Letter, Ata Ul Haq to City Engineer. 20th October, 1954.

Exhibits 15.	Cutting and fix top of quarry	ing of Manglore Files including	Tiles on pointing	Shs. 29.00	
Letter, Ata Ul Haq to	Cutting and fix:	ing of Manglore	Tiles to	17.00	
City Engineer. 20th October,	-	inting to flas	hing	18.00	
1954	4 Carbel Stones	@ Shs.4/50 eac	h	18.00	
- continued.	The difference cutting of $l_2^{11}$		astage in	14.00	
	Profit	• • •		30.00	10
			TATOT	Shs.338.00	

In case you require any sort of explanation as to how I made up this amount, I am always prepared to explain it.

Yours faithfully, ATA-UL-HAQ CONTRACTOR.

#### PLEASE NOTE.

I regret to inform you that a clerical error was made by my clerk in that when adding the amount 20 he showed the figure of Shs. 238/- instead of Shs. 338/- thus making a mistake of Shs.100/- when submitting the tender of 9th instant.

Under the circumstances I shall be grateful if you will please consider the previous tender of 9th instant as cancelled and the fresh tender of 338/- as shown above be regarded as correct.

16.
Letter,
City Engineer
to Ata Ul Haq.
9th December,
1954.

#### EXHIBIT 16.

### LETTER, CITY ENGINEER TO ATA UL HAQ.

9th December, 1954. 30

Mr. Ata-Ul-Haq, P.O. Box 2809, NAIROBI.

Dear Sir,

Doonholm Neighbourhood
Stage One, Part B, Contract No.73.

I refer to your letter dated 20th October,

1954, in which you submit a price of Shs.338/00 for each 9" step-down in the roof. As already pointed out to you by the Architect, this sum is excessive. A sum of Shs.268/00 is considered more realistic, and I am prepared to authorise this amount.

If this is not acceptable to you, I require you to submit detailed quantities and rates for the work involved. These quantities and rates are to be brought to the Architect at the Town Hall, who will examine them.

Yours faithfully,

CITY ENGINEER.

Copy to: Mr. Tanner.

#### EXHIBIT 17.

#### LETTER, ATA UL HAQ TO CITY ENGINEER

P.O. Box 2809, NAIROBI, 14th January, 1955.

20 The City Engineer, P.O. Box 651, NAIROBI.

Dear Sir.

#### Doonholm Neighbourhood Stage 1. Part B, Contract No. 73.

I refer to your letter CE. 9265/T/H/9/N/73 dated 9th December 1954 on the subject of the payment for the extra work involved by the construction of 9" step-downs in roofs to blocks of houses.

I regret that your offer of Shs.268/- per step-down is not sufficient to cover the actual cost of the work on which I have added a profit of only Shs.30/-.

You instruct me to submit detailed quantities and rates for the work involved to the Architect, but in accordance with the Conditions of Contract, a copy of the Bill for your measurement and valuation should be sent to me.

Yours faithfully, ATA-UL-HAQ.

#### Exhibits

16.

Letter, City Engineer to Ata Ul Haq.

9th December, 1954 - continued.

17.

Letter, Ata Ul Haq to City Engineer. 14th January, 1955.

30

18.

Variation Order, No.3739. 5th February, 1955.

#### EXHIBIT 18.

#### VARIATION ORDER NO. 3739

COUNCIL OF NAIROBI CITY CITY ENGINEER'S DEPARTMENT CONTRACT VARIATION OKDER

Messrs. Ata ul Haq, P.O. Box 2809, Nairobi.

CONTRACT - Docnholm Neighbourhood Part B Stage One.

- 1. The following variation to the works being carried out by you under Contract No.73 will be made during the execution of the Contract.
- 2. Work will be carried out according to the Specification, General conditions of Contract, Drawings and shall be measured in accordance with the Bill of Quantities, or as stated below.
- 3. Additional time allowed for this variation will be .........
- 4. No objection to this order will be entertained unless lodged in writing with the City Engineer within 7 days from the date hereon.

Serial Description of Work Quan-B.Q. Rate Remarks

Provide and fix metal flashings to chimney stacks, all secured grooves cut into sheets and dressed tiles 6" and to turn up 4" against side and front abutments, 6" against rear abutment.

2 flue stacks 1

142/- each 75/- each

(No Variation to flues layer than normal is required)

To be measured on completion

Order No. 1/3739 Previous Order No: 40

Checked by:

Sd.? Tanner. Approved

> Sd. R.W. Saunders CITY ENGINEER.

30

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Date:

Feb. 5th 155.

#### EXHIBIT 19.

#### VARIATION ORDER NO. 3740

CITY COUNCIL OF NAIROBI CITY ENGINEER'S DEPARTMENT CONTRACT VARIATION ORDER

Messrs. Ata Ul Haq, P.O. Box 2809, Nairobi.

CONTRACT - No. 73 Doonholm Neighbourhood, Part B.

- 10 l. The following variation to the works being carried out by you under Contract No.73 will be made during the execution of the Contract.
  - 2. Work will be carried out according to the Specification, General Conditions of Contract, Drawings and shall be measured in accordance with the Bill of Quantities, or as stated below.
  - 3. Additional time allowed for this variation will be NONE.
- 4. No objection to this order will be entertained unless lodged in writing with the City Engineer within 7 days from the date hereon.

Serial Description of Work Quan-B.Q. Rate Retity Item Rate

Metal flashings as described on V.O.1/3739 to one Flue Stack not situated at gable ends of buildings.

120/each Exhibits

Variation Order

25th February.

19.

No.3740.

1955.

To be measured at completion.

Order No. 2/3740

Previous Order No. 1/3739

Checked by: ??

Date: February 25th 1955

Approved

J.R. Bridger City Engineer.

20.

Variation Order No. 3741.

12th March, 1955.

#### EXHIBIT 20.

#### VARIATION ORDER NO. 3741

CITY COUNCIL OF NAIROBE CITY ENGINEER'S DEPARTMENT COMPRACT VARIATION OFDER

Messrs. Ata Ul Haq, P.O. Box 2809, NATROBI.

CONTRACT - Doonholm Neighbourhood Part B.

- 1. The following variation to the works being carried out by you under Contract No.73 will be made during the execution of the Contract.
- 2. Work will be carried out according to the Specification, General Conditions of Contract, Drawings and shall be measured in accordance with the Bill of Quantities, or as stated below.
- 3. Additional time allowed for this variation will be NONE.
- 4. No objection to this order will be entertained unless lodged in writing with the City Engineer within 7 days from the date hereon.

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## Serial Description of Work Quan- B.Q. Rate Re-

Alteration to latrine detail - Adult type Drawing No.3378/AH/ 28/99

Children type

Children type latrines are to be provided in the ratio 1:3 in all ablution blocks not already constructed.

No change in price

40/- extra per latrine.

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#### Order No. 3/3741

Previous Order No. 2/3740

Checked by: ???

Date: March 12th 1955.

Approved

J.R. Bridger

City Engineer.

#### EXHIBIT 21.

#### LETTER, ATA UL HAQ TO CITY ENGINEER

P.O. Box 2809, NAIROBI, 17th March, 1955.

The City Engineer, P.O. Box 651, NAIRCBI.

Dear Sir,

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#### Doonholm Neighbourhood Stage 1, Part B, Contract N.73.

I refer to your letter CE.802/T/W/9/N/73 dated the 11th of September 1954 in which you say that you are not prepared to grant any extra payment in respect of the extra batten which has been fixed on the top of the fascia board to the roofs of blocks of buildings.

According to Drawing No. 2183/AH/2/14 there are ten tiles from the ridge to the eaves of the roofs and the tiles are specified as first grade local Mangalores. It was clear at the time of tendering that the number of tiles shown on the drawing was wrong, that the proper number of tiles should be nine, and that this number should be used in preparing the Tender. It therefore follows that only nine battens have been allowed for, and the tenderer could not be expected to anticipate that an extra batten would be required over the fascia board.

There is a direction in Clause 33 of the Specification which requires the Contractor to provide and fix tiling battens at suitable centres to receive mangalore tiles.

In this contract, which is not founded on a Bill of Quantities, decisions should be based on the intent of the documents, and not on a measurement of reputed quantities, and the Contractor should not be penalised for having interpreted intelligently, at the time of tendering, the documents provided, and for having made due allowance for a palpable error in the drawings. I claim that the drawing of the tiles on the roof is diagrammatic only, and that the intent of the Contract is fulfilled by the use of the specified tiles, the covering of the roof with them to the limit of the specified minimum projection, and the provision of

#### Exhibits

Letter; Ata Ul Haq to City Engineer. 17th March, 1955.

21.

Letter, Ata Ul Haq to City Engineer. 17th March, 1955

- continued.

22.

Letter, City Engineer to Ata Ul Haq. llth September, 1954. the necessary battens on which to hang them.

I shall be glad if you will reconsider your decision not to pay the value of this extra work, which was, as you are aware, ordered by your representative, and carried out by me in good faith.

Yours faithfully,

DAH-IU-HAQ

#### EXHIBIT 22.

#### LETTER, CITY ENGINEER TO ATA UL HAQ

11th September, 1954. 10

Ata-Ul-Haq, P.O. Box 2809, Nairobi.

Dear Sir,

#### Doonholm Neighbourhood Stage 1, Part B, Contract N.73.

I refer to your three letters dated 27th August 1954 on the above subject.

I am not prepared to grant any extras for which you are claiming for the following reasons:- 20

- (1) The detail drawings show the foundation to the ablution blocks to be similar to the dwelling units.
- (2) The number of battens fixed on the buildings is the same as shown on the detailed drawings.
- (3) I am prepared to consider the approval of any lime that you wish to use that approximates to British Standard Specification.

  A recent test report from the Public Works 30 Department must be submitted for any change from the approved lime.

Yours faithfully,

CITY ENGINEER.

#### EXHIBIT 23.

#### LETTER, T. L. STONE TO ATA UL HAQ

Clerk of Works Office, African Housing, Doonholm Road, Neighbourhood Site.

26.1.55.

#### Exhibits

23.

Letter, Clerk of Works to Ata Ul Haq. 26th January, 1955.

Messrs. Ata-ul-Haq, Contractor, African Housing, Doonholm Road, Neighbourhood Site.

Dear Sirs,

#### Block No. 28 and 29

At an inspection today it was noted that further shrinkage of the doors fitted to the above blocks is taking place and in some instances daylight can be seen through the spaces in the fronts of the linings to the doors when standing in the rooms.

A list is given below shewing the defects which have taken place since taking over the above blocks.

#### Block No.28 - Room No.395.

Shutters have dropped badly and will not close properly.

Door Pad Bolt is binding and will not close.

#### Room No.391.

Casement stay has come away from the shutter.

Pad bolt is binding and the door cannot be bolted.

#### Room No.400.

Casement has come away from the shutter. Shutter hinges are bent and damaged.

#### Ablution Block No. 28.

The plaster to the jamb of the lavatory and wash places has fallen away and needs repair.

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23.

Letter, Clerk of Works to Ata Ul Haq. 26th January, 1955

- continued.

#### Block No.29 - Room No.361.

The door has dropped badly. The door cannot be closed properly. The casement stay has come away from the shutters.

#### Room No.368.

The shutters have dropped badly and cannot be closed. The pad bolt is binding in the door and needs adjustment.

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Arrangements should be made by you to have the doors examined and the repairs set out above carried out at your expense.

Yours faithfully, (Sgd.) T.L. Stone.

#### Addendum to page 72.

#### Block No.29 - Room No.362.

The meeting style of the door is badly cracked at the top and bottom.

20

#### Room No.267.

The door is binding and it is not possible to close the pad bolt.

#### Room No.370.

The lining of the door is shrunk very badly and needs immediate attention.

#### Rcom No.374.

The casement stay has come away from the shutter.

(Sgd.) T.L. Stone.

#### EXHIBIT 24

#### LETTER, CLERK OF WORKS TO ATA UL HAQ

Clerk of Works Office, Doonholm Road, Neighbourhood Site.

18/2/55.

Messrs. Ata-Ul-Haq, Contractor, African Housing, Doonholm Road, Neighbourhood Site.

Dear Sirs,

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#### Repairs to gable wall, ablution block No.28

I have been requested by the architect African Housing City Council, Nairobi, to instruct you to rectify the damage to gable wall of building No.28 (ablution block).

The details of the materials and labour required to complete the work are to be kept and the total charges to be handed to the Clerk of Works at the completion of the work.

Please inform me when the work is complete.

Yours faithfully,

222

#### EXHIBIT 25.

#### LETTER, CITY ENGINEER TO ATA UL HAQ

31st March, 1955.

Mr. Ata-Ul-Hag, P.O. Box 2809, NATROBI.

Dear Sir,

Ofafa Estate (Doonholm Neighbourhood) Stage 1, Part B, Contract No.73

I have to inform you that the following units were accepted by the Council on 29th March 1955, under the above contract -

#### Exhibits

24.

Letter, Clerk of Works to Ata Ul Haq. 18th February, 1955.

25.
Letter,
City Engineer
to Ata Ul Haq.
31st March,
1955.

Exhibits 25. Letter, City Engineer to Ata Ul Haq.	Block No. No.Rooms Room No. Value  26 29 417-444	
31st March, 1955 - continued.	c.c. C.A.A.O. CITY ENGINEER.  M.O.H. B.W.S. Mr. Hannington Clerk of Works Mr. Tanner Mr. Hattersley Cleansing Superintendent.	10
26.	EXHIBIT 26.	
Letter, City Engineer to Ata Ul Haq. 31st March, 1955.	LETTER, CITY ENGINEER TO ATA UL HAQ  31st March, 1955.  Mr. Ata-Ul-Haq, P.O. Box 2809, NAIROBI.	
± )		20
	Stage 1, Part B, Contract N.73.	
	I have to inform you that the following units were accepted by the Council on 26th March 1955, under the above contract -	
	Block No. No. Rooms Room No. Value	
	25 12 445-456 Shs. 39,600/-	
	27 10 407-416 33,000/-	
	22 Total 72,600/-	
	with a final part of the contract of the contr	

CITY ENGINEER.

Yours faithfully,

#### EXHIBIT 27

#### LETTER, CITY ENGINEER TO ATA UL HAQ

#### CITY COUNCIL OF NAIROBI

TOWN HALL, NAIROBI, KENYA COLONY.

19th April, 1955.

#### Exhibits

27.

1955.

Letter, City Engineer to Ata Ul Haq. 19th April,

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Messrs. Ata-Ul-Haq, P.O. Box 2809, NAIROBI.

Departmental Reference

C.E./RM/T/1029

Dear Sir,

#### Ofafa Estate (Stage 1, Part B, Contract 73)

I have to inform you that the following units were accepted by the Council on 16th April 1955, under the above contract.

Block No.	No.Rooms	Room No.	Value
35	42 +	273-314 5 Ablution Units	163,600 Shs.

Yours faithfully, (Sgd.) H.R. Bridger, CITY ENGINEER.

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#### EXHIBIT 28.

#### LETTER, ACTING CITY ENGINEER TO ATA UL HAQ

11th May, 1955

Ata-Ul-Haq, P.O. Box 2809, NAIROBI.

30 Dear Sir,

Ofafa Estate, Stage 1, Part B, Contract No.73.

I have to inform you that the following units were accepted by the Council on 10th May 1955, under the above contract

28.

Letter,
Acting City
Engineer to
Ata Ul Haq.
11th May, 1955.

Exhibits	Block No.	No .Rooms	Room No.	Value
28. Letter,	36	44	229-272 + 1 No.Abl.Unit	Shs.150,220/-
Acting City Engineer to Ata Ul Haq.			Yours faithf R.W. Saund	• •
11th May, 1955 - continued.			ACTING CITY EN	GINEER.

29.
Letter,
Acting City
Engineer to
Ata Ul Haq.

26th June, 1955.

#### EXHIBIT 29.

## LETTER, ACTING CITY ENGINEER TO ATA UL HAQ 26th June, 1955.

Mr. Ata-ul-Haq, P.O. Box 2809, NAIROBI.

Dear Sir,
Ofafa Estate, Stage 1, Part B, Contract 73.

I have to inform you that the following units were accepted by the Council on 28th June, under the above contract.

Block No.	No.Rooms	Room No.	Value
31 32	125-140 141-172	16 32 + 2 Abl.	Shs. 53,600.00
33	91-110	Units 20 + 2 Abl.	115,600.00
34	111-124	Units 14 + 2 Abl.	76,000.00
		Units	56,900.00
			302,100.00

Yours faithfully, R.W. Saunders ACTING CITY ENGINEER.

30. Report by Clerk of Works.

9th June, 1955.

EXHIBIT 30

REPORT BY CLERK OF WORKS CITY COUNCIL OF NAIROBI

Memo from W.H.M.Goodwin, C/Wks. 9/6/1955. To - The Architect, Contract No.73, "B".

Blocks 38A, 38B and 29, have been inspected; repairs carried out; and are now ready for handing over. and Block 30.

(Sgd.) W.H.M. Goodwin, C/Wks.

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*~* C

#### EXHIBIT 31.

### REPORT OF CLERK OF WORKS.

#### CITY COUNCIL OF NAIROBI

Date 9th June, 1955.

Memo from W.H.M.Goodwin, C/Wks.

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30

To - The Architect, Contract No.73, "B", Ofafa Es-

Copy to Messrs. Ata-ul-Haq.

The result of a check-up of points on this Contract are as follows:-

- 10 l. Foundations. Mr. Stone has details of the extra work.
  - 2. Boundary Wall. Straight between buildings on drawings. Altered to stand forward with wing return at each end; resulting in about five foot of extra run of wall and two "T" wall junctions in each case. This can easily be measured at any time.
  - 3. Blocks 38A & 39. The end Units were turned round at I angles to remainder of Blocks. Mr. Stone has details of this work.
  - 4. Ablutions. A 4" x 2" top plate has been fixed across the tops of the whole row of doors in each Ablution to stiffen them.
  - 5. Blocks 28 and 29. 3 loads of murram were supplied and laid and rolled to form pathway, for temporary occupation by Mission, at Mr.Stone's instruction.
  - 6. Doors. In place of 12" specified, 14" strap hinges fitted to all doors throughout this contract.
  - 7. Valleys. 6" x 2" main rafters fitted. Not in spec. or drawings.
  - 8. Fascia Boards. All in Cedar in place of Podo specified.
  - 9. Ablution trusses. King Posts 4" x 2". 3" x 2" specified.
  - 10. Floors. To form a key all slurried in cement, then  $\frac{3}{4}$  to 1" finish laid, in place of  $\frac{1}{2}$ " specified, to make a finish.
- 40 11. Lintels. Drawings show  $5\frac{1}{2}$  high to match courses. 9" x 6" are provided throughout, to conform the standard practice.

#### Exhibits

31.

Report of OS Clerk of Works.
9th June, 1955.

. 3

31.

Report of Clerk of Works. 9th June, 1955. - continued.

- 12. All Buildings. A finishing 4" deep faced cement fillet has been provided round buildings to conceal concrete layer.
- 13. Valley Boards, are 6" x 1" in place of 9" x 1" specified.
- 14. Valley Tiling is not rubbed down fair to out tile edges.
- 15. Ablution doors braces and rails are 4" wide, not 5" specified.
- 16. Strap Hinges. All screws used, not one bolt to each, specified.
- 17. Chimneys. Not all "parged".
- 18. Doors. These are all F.L.B. none are flush pattern.
- 19. Stone. All hard black stone, not soft white.
- 20. Ridges. Colour in mortar, not applied afterwards.
- 21. Tiles. Three loads of rejects returned, and a further pile are waiting to be returned to Kentiles.
- 22. Work. In view of the difficulty of getting reliable workmen, contractor says he was on site every day and all day, to get the finish which he considers the best possible under the conditions.

Contractor considers items 1 to 5 are Variations, and 6 to 12 are extras to offset the omissions in Items 13 to 17; and he asks for items 18 to 22 to also be taken into account.

(Sgd.) W.H.M. Goodwin.

30

20

WHMG.

C/Wks.

Notes:- Price sent in for Ablution Number alterations.

Contractor has one Variation Order - for flashings.

In this contract there is no mention of fitting Traps in channel connections to road-verge drain.

#### EXHIBIT 32.

#### REPORT OF CLERK OF WORKS

CITY COUNCIL OF NAIROBI.

Memo from W.H.M. Goodwin, C/Wks.

Date 24th June, 1955.

To - The Architect, African Housing.

Herewith a list of all floor defects found yesterday when Blocks 30, 38A, 38B and 39 were inspected for taking over.

#### 10 Block 38A.

```
Room No.175
              Crack across floor
         176
                       do.
   1î
         177
                       do.
   17
                                    and 1 hollow patch.
         179
                       do.
   if
         181
                       do.
   11
         182
                       do.
```

#### Block 38B.

```
3 Cracks in floor 2 do.
     Room No.186
         Ħ
               188
         11
20
               189
                    1
                            do.
         11
                                         1 hollow patch.
               190
                    1
                            do.
                                         Verandah 1 crack.
         11
                                         Kitchen 3 hollow
               191
                    1
                            do.
                                         patches.
         11
               192
                            do.
         11
               194
                                         3 hollows.
                    2
                            do.
                                         Verandah 2 cracks.
```

#### Block 39.

40

Room No.197 3 cracks in floor. Kitchen 1 hollow patch.

30	11	198	1	do.	and 1 in Kitchen.
	tt	199	1	do،	
	11	200	3	do.	
	11	201	4	do.	
	11	202	i	do.	
	11	203			Kitchen 1 hollow
	tt	204	1. h	ollow	near chimney.

" 206 l crack in floor.

" 207 2 hollow patches.
" 208 2 do.

" 209 2 do.

" 211 Whole floor condemned
" 212 1 crack in floor 1 crack in Verandah
floor

" 214 1 do.

#### Exhibits

32.

Report of Clerk of Works.

24th June, 1955.

Exhibits 32. Report of Clerk of Works. 24th June, 1955 - continued.	Block 39 (Contd.)  Room No.214 Whole floor condemned  " 216 1 crack in floor  " 217	10
	He has also been given general instructions about the Limewashing. Chimney Caps, Ridges and Verges, and Roof Tiles.  Sd. W.H.M. Goodwin,  C/Wks on site.	
33. Report from Clerk of Works. 20th July, 1955.	EXHIBIT 33.  REPORT FROM CLERK OF WORKS  CITY COUNCIL OF NAIROBI  Memo from Clerk of Works  Date 20/7/55.  To Messrs. Ata Ul Haq, Contract 73/B.	20
	Reference inspection of Block 38 this morning, herewith a list of items for attention -  Ablution. Adjust tiles where light shows through.  Room 45 Adjust tiles where they have slipped down 48 Do.  53 Chimney flashing appears to be leaky.  55 Do.  58 Replace broken tile.  60 Repair crack in door batten Adjust chimney flashing and tiles.  62 Adjust tiles.  63 Repair top rail of door.  64 Verandah, fix down holdfasts to wall plate 64 to 69 Clean limewash off tiles and shelves, etc.  70 Ease door.	30 40

Room 71 Clean limewash off tiles.

72 Do.

10

20

73 Repair shrunk door, batten.

76 Replace faulty valley tile.

80 Adjust one shutter and shutter bolt. 82 Repair top rail of door. Kitchen adjust roof tiles.

70 to 82, clean limewash off tiles generally.

Ablution Adjust tiles where light shows through.

Note - Several chimney cappings need facing up round the edges.

> (Sgd.) W.H.M. Goodwin C/Wks.

EXHIBIT 34

REPORT BY CLERK OF WORKS

Memo from C/Wks to Architect African Housing.

Blocks 37 and 38 have been completed, repairs carried out: and they are now ready for handing over.

25th July, 1955.

W.H.M. Goodwin C/Wks.

EXHIBIT 35

PAYMENT CERTIFICATES NO.1 to 13.

Certificate No. 1.

Date - 23rd July, 1954.

CITY COUNCIL OF NAIROBI

CONTRACT PAYMENT CERTIFICATE

Contractor:

Ata Ul Haq.

Contract No:

Amount Shs:1709520/-73 Dated:

Doonholm Neighbourhood, Stage 1, Part B. Work:-

28/6/54 30 Commenced:

Completed:

Exhibits

33.

Report from Clerk of Works.

20th July.

1955

- continued.

34.

Report by Clerk of Works.

25th July, 1955.

35.

Payment Certificate No.1.

23rd July,

1954.

35.		Shs.Cts.	Shs.Cts.
ment tificate	Value of work completed	71500.00	The second se
No.1. 23rd July, 1954.	Net Addition for variations (see completion statement	5	
ontinued.	attached)	F7.500.00	
	Gross Amount Payable	71500.00	
	Less 10% Retention Money for months	7150.00	
	NET TOTAL	64350.00	
	Less Payments on Account (see previous certificate		
	Amount now due to Contractor	64350.00	64350.00
		R. Bridger Engineer.	
	·		
ment tificate	Striken visiter value	JUL. 54.	ıgust, 1954.
tificate 2. h August,	Certificate No. 2 I CITY COUNCIL ( CONTRACT PAYMENT)	Date: 20th Au DF WAIROBI	ıgust, 1954.
ificate 2. August,	Certificate No. 2  CITY COUNCIL O  CONTRACT PAYMENT  Contractor: ATA UL HAQ  Contract No: 73 Dated:	Date: 20th Au DF WAIROBI	
ificate 2. August,	Certificate No. 2  CITY COUNCIL COUNTRACT PAYMENT  Contractor: ATA UL HAQ	Date: 20th Au DF NAIROBI CERTIFICATE Amount Shs.	
ificate 2. August,	Certificate No. 2  CITY COUNCIL ( CONTRACT PAYMENT)  Contractor: ATA UL HAQ  Contract No: 73 Dated:  Work:	Date: 20th Au DF NAIROBI CERTIFICATE Amount Shs.	
ificate 2.	Certificate No. 2  CITY COUNCIL ( CONTRACT PAYMENT)  Contractor: ATA UL HAQ  Contract No: 73 Dated:  Work:	Date: 20th Au DF NAIROBI CERTIFICATE  Amount Shs. Completed:	L709520.00
ificate 2. August,	Certificate No. 2  CITY COUNCIL ( CONTRACT PAYMENT)  Contractor: ATA UL HAQ  Contract No: 73 Dated:  Work:  Commenced: 28/6/1954.	Date: 20th Au DF NAIROBI CERTIFICATE  Amount Shs.I Completed: Shs.Cts. 169250.00	L709520.00
ificate 2. August,	Certificate No. 2  CITY COUNCIL ( CONTRACT PAYMENT)  Contractor: ATA UL HAQ Contract No: 73 Dated: Work: Commenced: 28/6/1954.  Value of work completed Net Addition for variations (see completion statement attached)	Date: 20th Au DF NAIROBI CERTIFICATE  Amount Shs. Completed: Shs.Cts. 169250.00	L709520.00
ificate 2. August,	Certificate No. 2  CITY COUNCIL ( CONTRACT PAYMENT)  Contractor: ATA UL HAQ Contract No: 73 Dated: Work: Commenced: 28/6/1954.  Value of work completed Net Addition for variations (see completion statement	Date: 20th Au DF NAIROBI CERTIFICATE  Amount Shs.I Completed: Shs.Cts. 169250.00	L709520.00

****	Shs.Cts.	Shs.Cts
Brought forward	152325.00	
Less Payments on Account (see previous certificate)	64350.00	
Amount now due to Contractor	87975.00	87975.00
	R.Bridger, Engineer. <u>Date</u> :	20 AUG.54
Certificate No: 3 De	ate: 22 Sept	ember, 195
CONTRACT PAYMENT		}
Contractor: Ata Ul Hag.		-
	Amount Shs:	1709520/-
Work: - Doonholm Neighbourho	ood, Stage 1	, Part B.
Commenced: 28.6.54	Completed:	
	Shs.Cts.	Shs.Cts
Value of work completed	440250.00	
Addition		
(see completion statement attached)		
(see completion statement	440250.00	
(see completion statement attached)  Gross Amount Payable	440250.00	
attached) Gross Amount Payable Less 10% Retention Money		
(see completion statement attached)  Gross Amount Payable Less 10% Retention Money for months  NET TOTAL	44025.00	
(see completion statement attached)  Gross Amount Payable Less 10% Retention Money for months  NET TOTAL Less Payments on Account (see previous certificate	44025.00 396225.00 152325.00	234900.00

35.

Payment Certificate No.2.

20th August, 1954 - continued.

Payment Certificate No.3.

22nd September, 1954.

10 B

35.

Payment Certificate No. 4.

25th October, 1954.

Certificate No: 4

Date: 25 October 1954.

CITY COUNCIL OF MAIROBI

CONTRACT PAYMENT CERTIFICATE

Contractor: Ata Ul Haq

Contract No: 73 Dated: Amount Shs: 1709520/-

Work: - Doonholm Neighbourhood, Stage 1, Part B.

Commenced: 28.6.54 Completed:

Shs.Cts. Shs.Cts. Value of work completed 585250.00 Net Addition for variations (see completion statement attached) Gross Amount Payable 585250.00 Less 10% Retention Money for months 58525.00 NET TOTAL 526725.00 Less Payments on Account (see previous certificate No.3  $\bar{d}/d$  22.9.54) 396225.00

Amount now due to Contractor 130500.00 130500.00

Certified Correct: Sd.J.R. Bridger, City Engineer.

Date: 25.10.54

10

Certificate No: 5

Date: 23 November 1954

Exhibits

CITY COUNCIL OF NAIROBI

35.

Payment Certificate

No. 5.

#### CONTRACT PAYMENT CERTIFICATE

Contractor: Ata Ul Haq Contract No: 73

Amount Shs: 1709520/-Dated:

Doonholm Neighbourhood, Stage 1. Part B. Work:-

Commenced: 28/6/54

Completed: 18/4/55.

23rd November. 1954.

	Shs.Cts.	Shs.Cts.
Value of work completed  Net Addition for variations (see completion statement attached)	717100.00	
Gross Amount Payable	717100.00	

Less 10% Retention Money for

months

71710.00

NET TOTAL

645390.00

Less Payments on Account (see previous certificate No.4 d/d 25/10/54)

526725.00

20 Amount now due to Contractor 118665.00 118665.00

Certified Correct: Sd. J.R. Bridger, City Engineer.

Date: 24 Nov. 1954.

Certificate No: 6 Exhibits Date: 30 December 1954 35. CITY COUNCIL OF MAIROBI Payment Certificate CONTRACT PAYMENT CERTIFICATE No. 6. 30th December, Contractor: Ata Ul Hag 1954. Contract No. 73 Dated: Amount Shs. 1709520/-Work:- Doonholm Neighbourhood, Stage 1, Part B. Commenced: 28/6/54 Completed: 18.4.55. Shs.Cts. Shs.Cts. Value of work completed 976020.00 Net Addition for variations 10 (see completion statement attached) Gross Amount Payable 976020.00 Less 10% Retention Money for months 97602.00 NET TOTAL 878418.00 Less Payments on Account (see previous Certificate No.5 d/d 23/11/54) 645390.00 Amount now due to Contractor 233028.00 233028.00 20 Certified Correct: Sd. J.R. Bridger, City Engineer.

Date: 30.12.54.

Certificate No: 7

Date: 1 February 1955

Exhibits

CITY COUNCIL OF NAIROBI

35.

CONTRACT PAYMENT CERTIFICATE

Payment Certificate No. 7.

Contractor: Ata Ul Haq.

1st February, 1955.

Contract No. 73 Dated: Amount Shs.1709520/Work:- Doonholm Neighbourhood Scheme, Stage 1,

Part B.

<u>Commenced</u>: 28.6.54.

Completed: 18.4.55.

Shs.Cts. Shs.Cts.

Value of work completed

1115800.00

Net Addition for variations (see completion statement attached)

Gross Amount Payable

1115800.00

Less 10% Retention Money for months

111580.00

NET TOTAL

1004220.00

Less Payments on Account (see previous certificate No.6 d/d 30/12/54

878418.00

20 Amount now due to Contractor

125802.00 125802.00

Certified Correct:

J.R. Bridger, City Engineer.

Date: 1/2/1955.

Exhibits Certificate No: 8 Date: 16 February 1955 35. CITY COUNCIL OF NAIROBI Payment Certificate CONTRACT PAYMENT CERUIFICATE No. 8. 16th February, Contractor: Ata Ul Haq 1955. Contract No: 73 Dated: Amount Shs: 1709520/-Work: - Doonholm Weighbourhood Scheme, Stage 1, Part B. Commenced: 28.6.54 Completed: 18.4.55. Shs.Cts. Shs.Cts. Value of work completed 1251000.00 10 Net  $\frac{\text{Addition}}{\text{Omission}}$  for variations (see completion statement attached) Gross Amount Payable 1251000.00 Less 10% Retention Money for months 125100.00 NET TOTAL 1125900.00 Less Payments on Account (see previous certificate No.7 d/d 1.2.55) 1004220.00 20 Amount now due to Contrac-121680.00 121680.00 

Certified Correct: Sd. J.R. Bridger, City Engineer.

Date: 16.2.55.

Certificate No: 9

Date: 23 March 1955

Exhibits

35.

23rd March.

Payment Certificate

No. 9.

1955.

#### CITY COUNCIL OF NAIROBI

#### CONTRACT PAYMENT CERTIFICATE

Contractor: Ata Ul Hag

Contract No: 73 Dated: Amount Shs: 1709520/-

Work:- Doonholm Neighbourhood Scheme Stage 1,

Part B, Ofafa Estate.

Commenced: 28.6.54 Completed: 18.4.55.

Shs.Cts. Shs.Cts.

10 Value of work completed 1399500.00

Net Addition for variations
(see completion statement attached)

Gross Amount Payable 1399500.00

Less 10% Retention Money for months 139950.00

NET TOTAL 1259550.00

Less Payments on Account (see previous certificate No.8 d/d 16.2.55)

20

1125900.00

Amount now due to Contractor

113650.00 113650.00

Certified Correct: Sd. J.R. Bridger, City Engineer.

Date: 23 March 1955

Exhibits	Certificate No. 10	Date: 20th April 1955.	
35.	CITY COUNCIL	OF NAIROBI	
Payment Certificate No. 10.	CONTRACT PAYMENT	CERTIFICATE	
20th April, 1955.	Contractor: Ata Ul Haq Contract No. 73 Dated: Work:- Ofafa Estate, Sta		
	Commenced: 28.6.54	Completed: 18.4.55.	
		Shs.Cts. Shs.Cts.	
	Value of work completed	1464018.00	
	Net Addition for variations (see completion statement attached)		10
	Gross Amount Payable	1464018.00	
	Less 10% Retention Money for months	146402.00	
	MET TOTAL	131761.6.00	
	Less Payments on Account (see previous certificate No.9 d/d 23.3.55)	1259550.00	
	Amount now due to Contractor	58066.00 58066.00	20
	Certified Correct: Sd.? Roberts, Deputy City Engineer.		

Date: 20.4.55.

Certificate No.11

Date: 24 June, 1955

Exhibits

CITY COUNCIL OF NAIROBI

35.

CONTRACT PAYMENT CERTIFICATE

Payment Certificate No. 11.

Contractor: Ata Ul Haq

24th June, 1955.

Contract No. 73 Dated: Amount Shs: 1709520/-

Work:- Ofafa Estate, Stage 1, Part B.

Commenced: 28.6.54 Completed: 18.4.55.

Shs.Cts. Shs.Cts.

Value of work completed

10

20

1531538.00

Net Addition for variations (see completed statement attached)

Gross Amount Payable 1531538.00

Less 10% Retention Money for months

153154.00

LATOT TEM

1378384.00

Less Payments on Account (see previous certificate No.10 d/d 20.4.55)

1317616.00

Amount now due to Contractor

60768.00 60768.00

Certified Correct: Sd. ? Roberts,
Deputy City Engineer.

Date: 27.6.55.

Date: 24 June, 1955 Exhibits Certificate No. 12. 35. CITY COUNCIL OF MAIROBI Payment Certificate CONTRACT PAYMENT CERTIFICATE No. 12. 24th June, Contractor: Ata Ul Hag 1955. Dated: Amount Shs: 1709520/-Contract No. 73 Work:- Ofafa Estate, Stage 1, Part B. Commenced: 28.6.54 Completed: 18.4.55. Shs.Cts. Shs.Cts. Value of work completed 1564099.00 10 Net Addition for variations (see completed statement attached) Gross Amount Payable 1564099.00 Less 10% Retention money for months 156410.00 NET TOTAL 1407689.00 Less Payments on Account (see previous certificate No.11 d/d 24.6.55) 1378384.00 20 Amount now due to Contrac-29305.00 29305.00 tor Certified Correct: Sd. ? Roberts, Deputy City Engineer.

Date: 27.6.55.

Certificate No.13.

Date: 21st July, 1955

Exhibits

35.

CONTRACT PAYMENT CERTIFICATE

CITY COUNCIL OF NAIROBI

Payment Certificate No.13.

21st July,

1955.

Contractor: Ata Ul Hag

Amount Shs: 1709520/-Contract No. 73 Dated:

Ofafa Estate. Stage 1. Part B. Work:-

Commenced: 28.6.54 Completed: 18.4.55.

Shs.Cts. Shs.Cts. Value of work completed 1064320.00 548220.00 Net  $\frac{\text{Addition}}{\text{Omission}}$  for variations 10 (see completion statement attached) Gross amount payable 1612540.00 Less: 5% of 1064320 53216 10% of 548220 54822 108038.00 Retention money for months 1504502.00 NET TOTAL Less Payments on Account (see previous certificate No.12 d/d 24.6.55 20 1407689.00 Amount now due to Contrac-96813.00 96813.00 tor

Sd. ??? Certified Correct:

A.g. City Engineer.

Date: 21.7.55.

36.

Inspection Report.

25th November, 1954.

## EXHIBIT 36

## INSPECTION REPORT

AFRICAN HOUSING DOONHOLM ROAD, MEIGHBOURHOOD SITE. PART "B", INSPECTION 25/11/54.

Repairs to be carried out as a result of an inspection on buildings Nos. 28 and 29, prior to taking over. The inspection was made by the Building Works Superintendent and his Assistant also the Clerk of Works.

Build- ing No.	Room No.	Repairs to be executed	
28	A STATE OF THE PERSON ASSESSMENT	External:	
		(a) Fascia board. There is a slight sag in the facia board on the verandah side of the building.	
		(b) Albi facia at end (Nairobi side) it does not bend up to corbel.	
	387	(a) Kitchen door lining shrunk.	
		(b) Clean floor droppings from white-wash.	
		(c) Rafter on the splay re-set.	
	388	(a) Doors to main room and kitchen have shrunk linings.	
		(b) Clean floors as above.	
		(c) Adjust tiles (half tiles) at flashing.	
	389	(a) Door to main room, the linings are shrunk and door is binding.	
		(b) Leak at chimney flashing.	
	390	(a) Door to main room - shrinkage of linings to head and sides.	
		(b) Floor - crack and hollow patch.	
		(c) Crack in wall over door.	
	391	(a) Clean floor - whitewash droppings.	
		(b) Doors to main room and kitchen shrunk.	
		(c) Hair crack in floor repaired.	
		(d) There is a loose stone near chimney flashing - re-fix.	2

	Michael Marchael ann an Airm an Marchaelain an Airm an	N. DOF LABORATED PARK.		Exhibits
	Build- Room		Poneing to be executed	36.
	ing No.		Repairs to be executed	Inspection Report.
	28 392 (Contd.)	(a)	Doors to main room and kitchen The linings are shrunk - gaps filled with putty.	24th November, 1954 - continued.
		(b)	Crack in floor and hollow patch.	
10	393	(a)	Clean cement and whitewash droppings from verandah floor, also in main room.	
		(b)	Doors to main room and kitchen - the linings have shrunk.	
	394	(a)	Clean floors - whitewash drop- pings.	
		(b)	Doors to main room and kitchen - the linings have shrunk.	
	395	(a)	Doors to main and kitchen - the linings have shrunk.	
20		(b)	Shutter left-hand side has dropped.	
	396	(a)	Doors to main room and kitchen - the linings have shrunk.	
		(b)	Clean floor, whitewash droppings.	
	397	(a)	Cracked and hollow floor.	
		(b)	Shutter left-hand side has dropped.	
	398	(a)	Doors to main room and kitchen - the linings have shrunk.	
		(b)	Cracked and hollow floor.	
. 30		(c)	Broken blade in louvre frame to kitchen.	
	399	(a)	Verandah floor cracked.	
		(b)	Adjust tiles at chimney flashing	
		(c)	Hollow patch in floor.	
	4.00	(a)	Door badly shrunk linings - replace. (Main room only).	
		(b)	Adjust second row of tiles on road side, badly twisted.	
40		(c)	Change blade in louvre frame in kitchen.	

Exhibits				THE PROPERTY OF THE PROPERTY O	
36. Inspection Report.	Build- ing No.	Room No.		Repairs to be executed	
24th November, 1954	28 (Contd.	401	(a)	Doors to main room and kitchen - the linings have shrunk.	
- continued.			(b)	Adjusted tiles - they are badly twisted.	
		402	(a)	Door to main room to be changed, badly shrunk linings.	
			(b)	Repair crack in floor. (Portion has been repaired).	10
			(c)	Hollow patch in floor.	
			(d)	Joint at purlin is incorrectly cut. Remake and bend with hoop iron.	
		403	(a)	Doors - shrunk lining in doors to main room and kitchen.	
			(b)	Take out and replace defective lining in shutter (left-hand side).	
		404	(a)	Replace door to main room - bad- ly shrunk linings.	20
		405	(a)	Clean floor, very dirty and drop- pings from whitewash.	
		406	(a)	Door to main room - shrunk linings.	
			(b)	Shutter on left-hand side dropped.	
			(c)	Split blade in louvre frame in kitchen.	
			Abl	utions	
			(a)	Clean floors (whitewash drop- pings).	30
			(b)	Clean whitewash from plastered walls in latrine and wash places.	
			(c)	Replace springs at back of doors.	
	29		Ext		

Point stone heads to louvre frames.

Build- ing No.	Room No.		Repairs to be executed	Exhibits 36. Inspection
29 (Contd.	)		eral: The screws on the casement stays are loose - (the one that is fastened to the shutter)	Report.  24th November,  1954  - continued.
		(b)	There are projections on the wire where hand holes have been cut in the square mesh metal to shutter openings. These should be removed and made smooth.	
	330	(a)	Main room door binding.	
	3 <b>3</b> 1	(a)	Clean floor - whitewash droppings.	
	332	(a)	Close up joint in ridge board.	
	3 <b>3</b> 3 (	(a)	Slight crack in the verandah floor.	
	}	(b)	Leak at chimney flashing.	
	(		(Note: Bed iron flashing flat.)	
	334	(a)	Close up open joint in ridge board.	
	335 (	(a)	Bed tiles at flashing at chimney.	
	(	(b)	Displaced tile at valley (re-set).	
	336`	(a)	Solignum to edge of doors and one rafter.	
		(b)	Alter twisted rafters at valley.	
	337	(a)	Crack in floor.	
	338	(a)	Crack in floor.	
		(b)	Adjust twisted tiles.	
	339	(a)	Remove cement droppings from verandah floor.	
		(b)	Crack in floor.	
		(c)	Fit hoop iron to joint in purlin.	
		(d)	Tiles to be re-bedded at joint to chimney flashing.	
	340	(a)	Crack in floor.	
		(b)	Tiles to be re-bedded at joint to chimney flashing.	

Exhibits 36. nspection	Build- Room ing No.	Repairs to be executed	
eport. 4th November,	29 341 (Contd.)	(a) Tiles to be re-bedded at joint to chimney flashing.	
954 continued.	342	(a) Cracked floor.	
	343	(a) Door to main room - replace defective head.	
		(b) Adjust tiles at flashing to chimney.	-
	344	(a) Head of door panel not square. Adjust frame and re-fix door.	
		External:	
		(a) Facia has dropped, verandah side.  Re-point tile under cloak at gable.	
	345	(a) Clean whitewash droppings from verandah.	
		(b) Adjust tiles at flashing to chimney.	1
		(c) Pointing to kitchen hall near chimney.	
	346	(a) Crack in floor.	
	347	(a) Adjust tiles and re-bed at flash-ing to chimney.	
	354	(a) Replace door to main room, shrunk linings.	
		(b) Adjust tiles and re-bed to flash- ing at chimney.	
	<b>3</b> 55	(a) Clean floor - whitewash droppings.	
		(b) Crack in floor.	
		(c) Whitewash - lintel to opening of kitchen.	
		(d) Crack in floor.	
	357	(a) Doors to main room and kitchen badly sbrunk - replace.	
		(b) Crack in verandah floor.	
		(c) Crack in floor.	
		(ā) Joint at ridge board is open - re-clamp.	4

Build- ing No.	Room No.	Repairs to be executed	Exhibits 36. Inspection Report.
29 (Contd.	358 •)	(a) Leak at flashing to chimney.	24th November, 1954
	359	<ul><li>(b) Crack in floor.</li><li>(a) Doors - linings are shrunk badly - replace.</li></ul>	- continued.
		(b) Crack and hollow patch in floor.	
		(c) Secure joint at purlin with hoop iron.	
	360	(a) Door to kitchen shrunk panel or linings.	
		(b) Crack in floor.	
	361	(a) Door to kitchen shrunk linings.	
		(b) Shutter dropped at left-hand side.	
	362	(a) Crack in floor.	
		(b) Displaced tile at valley.	
	363	(a) Fit hoop iron to joint at purlin	
		(b) Replace broken shutter.	
	364	(a) Joint at purlin is open - re- clamp.	
	365	(a) Joint at purlin is badly twisted. Re-set.	
	366	(a) Door to kitchen shrunk lining.	
		(b) Adjust twisted tiles.	
	367	(a) Doors to main room and kitchen shrunk lining.	
	368	(a) Doors to main room and kitchen shrunk lining.	
		(b) Section has been missed in flash- ing to drop in roof. Also tiles (half section) have been missed. Replace.	
	369	(a) Doors to main room and kitchen shrunk linings.	
	370	(a) Doors to main room and kitchen shrunk linings.	
		(b) Crack in floor.	

Exhibits			·	
36. Inspection	Build-Room ing No.		Repairs to be executed	
Report. 24th November,	29 371 (Contd.)	(a)	Doors to main room and kitchen shrunk linings.	
1954 - continued.		(b)	Crack and hollow patch in floor (re-render Section).	
		(c)	Crack under sill to shutter frame.	
	372	(a)	Doors to main room and kitchen - shrunk linings.	10
		(b)	Crack in floor.	
	373	(a)	Doors to main room and kitchen - shrunk linings.	
		(b)	Cracked and hollow floor, repatch.	
		(c)	Re-set tiles at chimney flashing.	
		(d)	Crack in floor at verandah.	
	374	(a)	Crack in floor.	
	375	(a)	Solignum to beading securing square metal at shutter opening.	20
	376	(a)	Fit hat and coat pegs, two sets.	
		(b)	Leak chimney flashing, also ridge.	
		(c)	Adjust tiles which are set on skew.	
	377	(a)	Crack in floor.	
	378	(a)	Replace two blades in louvre frame in kitchen.	
	379	(a)	Replace two blades in louvre frame in kitchen.	
		(b)	Door is binding (ease).	30
		(c)	Re-bed tiles at flashing to chimney.	
	•	(d)	Adjust twisted tiles in roof.	
		(e)	Change tile with broken lode.	
		(f)	Door in main room shrunk linings.	
	380		Replace centre hinge to main door.	
			Tiles are to be adjusted in roof. (They are twisted).	
		(c)	Door to main room is shrunk.	40

	Build- D		Exhibits
	ing Room No.	Repairs to be executed	36. Inspection
10	29 (Contd.) 381 382	<ul> <li>(a) Crack in verandah floor.</li> <li>(b) Crack and hollow patches in floor.</li> <li>(c) Doors to main room and kitchen - shrunk linings.</li> <li>(a) Crack in floor.</li> <li>(b) Re-bed tiles at flashing.</li> <li>(c) Roof tiles are twisted - re-set.</li> <li>(a) Crack in floor.</li> <li>(b) Roof tiles twisted, re-set.</li> </ul>	Report.  24th November 1954 - continued.
	384	<ul><li>(a) Main room door and kitchen door very badly shrunk, replace.</li><li>(b) Adjust badly twisted tiles in roof.</li><li>(c) Crack in floor.</li></ul>	
20	385	<ul><li>(a) Doors to main room and kitchen, the linings are shrunk.</li><li>(b) Adjust tiles in roof badly twisted.</li><li>(c) Fit hoop iron at joint in purlin.</li></ul>	
	386	<ul> <li>(a) Doors to main room and kitchen, the linings are shrunk.</li> <li>(b) Adjust twisted tiles in roof.</li> <li>External:</li> <li>(a) Cable end point tile at under cloak.</li> </ul>	
30		<ul> <li>(b) Cocked tile at single stack or chimney.</li> <li>(c) Short facie board at corbel at east end of building.</li> <li>T.H. STONE,</li> <li>Clerk of Works.</li> </ul>	

27.11.54.

728.

#### Exhibits

37.

Letter, Ata Ul Haq to City Engineer.

2nd August, 1955.

## EXHIBIT 37

## LETTER, ATA UL HAQ TO CITY ENGINEER

Office:-

Near Johns Garage.

P.O. Box 2809, Nairobi.

2nd August, 1955.

The City Engineer, Town Hall, NAIROBI.

Dear Sir,

Ofafa Estate - Stage 1, Part B, Contract N.73 10

I refer to payment certificate No. 13 dated 21st July for Shs.96,813 in respect of this Contract. As at the date of this certificate the contract was complete, but the value of work certified is less than the total amount of the work done. I shall be glad if a completion certificate can be issued without delay, so that all the monies due to me, excepting the 5% retention sum, may be paid.

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2. The delay in making payment in full may be due to the delay in taking over blocks of rooms after completion, but this does not seem to be any concern of mine, having received copies of certificates from the Clerk of Works to the Architect, to the effect that the final blocks have been passed as satisfactory. The dates of these certificates are:-

#### Blocks

38A, 38B, 39.

9th June, 1955.

37 & 38.

25th June, 1955.

Yours faithfully,

ATA-UL-HAQ.

## LETTER, ACTING CITY ENGINEER TO ATA UL HAQ

4th August, 1955.

Messrs, Ata-Ul-Haq, P.O. Box 2809, NAIROBI.

Dear Sirs,

Re Ofafa Estate, Stage 1, Part B, Contract No. 73.

In order to assess the quality of the work carried out in accordance with the Contract, the Council's representatives will be inspecting your work on the above site from 9.00 a.m. tomorrow, 5th August, 1955 and you are invited to be present at this inspection.

I must inform you that none of your remaining blocks will be taken over until the Council has reached a satisfactory conclusion of the state of work carried out.

20 You

Yours faithfully,

Sd.

for ACTING CITY ENGINEER.

c.c. Mr. Mould.

## EXHIBIT 39

# LETTER, ATA UL HAQ TO CITY ENGINEER

Office:-

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Near Johns Garage.

P.O. Box 613, Nairobi. 11th August, 1955.

The City Engineer, Town Hall, MAIROBI.

Re: Ofafa Estate, Stage 1, Part B, Contract No.73.

I refer to my letter of 2nd August and your No. CE.3487/M/DH/9/N/73 dated 4th August, 1955.

I do not know whether your letter under reference is a reply to mine or whether mine has been ignored. If the former is the case, I should be glad to learn in what particulars my work fails to meet with the requirements of the Contract, having

Exhibits

38.

Letter, Acting City Engineer to Ata Ul Haq. 4th August, 1955.

39.

Letter,
Ata Ul Haq to
City Engineer.

11th August, 1955.

39.

Letter, Ata Ul Haq to City Engineer.

11th August, 1955

- continued.

regard to

a) Your acceptance of all blocks completed with the exception of those listed in my letter under reference, but which have been approved by your representatives.

b) The full-time employment of your clerk of works on the site during construction of the works.

c) The frequent visits of inspection paid to the works by Mr. Tanner and by Mr. Mould.

I must ask you to comply with the requirements of the Contract, and issue forthwith a certificate in payment for the work completed, less 5% for retention fund and the return of my cash deposit.

Yours faithfully,

ATA-UL-HAQ.

40.

Letter, Acting City Engineer to Ata Ul Haq.

18th August, 1955.

EXHIBIT 40

# LETTER, ACTING CITY ENGINEER TO ATA UL HAQ CITY COUNCIL OF NATROBI

Departmental Reference: C.E.3647/M/DH/9/N/73 TOWN HALL, NAIROBI, KENYA COLONY.

18th August, 1955

Mr.Ata-ul-Haq, P.O. Box 2809, NAIROBI.

Dear Sir,

Ofafa Estate, Stage 1, Part B, Contract No.73

Thank you for your letter dated 2nd August 1955.

I can assure you that you have received all monies due to you under Payment Certificate No.13. The letter you received from the Clerk of Works was an advice note to the Architect and is not a certificate stating that the Council have accepted the blocks to which you refer. These blocks have not been accepted by the Council.

Yours faithfully, (Sgd.) ? Saunders. ACTING CITY ENGINEER. 30

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## LETTER, ATA UL HAQ TO CITY ENGINEER.

Office:-Near Johns Garage. P.O. Box 2809, NAIROBI. 11th July, 1955. Letter, Ata Ul Haq to City Engineer.

Exhibits

41.

11th July, 1955.

The City Engineer, Town Hall, NAIROBI.

Dear Sir,

Re: Ofafa Estate, Stage 1, Part B, Contract N. 73.

I have to acknowledge the receipt of your letter No.C.E. 3183/RFM/W/9/N/73 of 8th instant and beg to state:-

- 1. As regards to para. 1 of your letter I agree to your terms mentioned therein.
- 2. As regards to para. 2 of your letter I beg to state that the date of acceptance (28th June 1955) mentioned therein is not correct and I shall be grateful if you will please investigate about the date of acceptance.
- 3. As regards to para. 3, some samples had already been taken by your representatives and again you are welcomed to take more, if so desired.
- 4. As regards para. 5 I hereby acknowledge the receipt of your one cheque No.A 14701 for the month of May and June, but regret to point out that the retention money has been deducted 10% in all cases, whereas, Rule No.15 of Specifications states that "When the work has been satisfactorily completed and taken over by the Council, the Contractor shall be entitled to a Certificate for 95% of the value of the work executed".

Under the circumstances, I shall be grateful if you will please send me a cheque for the amount over-deducted for the work completed and taken over by the Council.

5. Furthermore, for your information, I beg to state that at the time of maintenance period, I will not be responsible for the damages done to drains by the Municipal lorries. The matter has already been reported to the Clerk of Works.

Thanking you,

Yours faithfully, ATA-UL-HAQ.

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### LETTER 42

42.

Letter, Acting City Engineer to Ata Ul Haq.

18th August, 1955. LETTER, ACTING CITY ENGINEER TO ATA UL HAQ

Mr. Ata-ul-Haq, P.O. Box 2809,

NAIROBI.

Dear Sir,

Ofafa Estate, Stage 1, Part B, Contract No.73.

Thank you for your letter dated 2nd August, 1955.

I can assure you that you have received all monies due to you under Payment Certificate No.13. The letter you received from the Clerk of Works was an advice note to the Architect and is not a certificate stating that the Council have accepted the blocks to which you refer. These blocks have not been accepted by the Council.

Yours faithfully,

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c.c. A.H.A.

ACTING CITY ENGINEER.

43.

Letter, Acting City Engineer to Ata Ul Haq. 19th August, 1955. EXHIBIT 43

LETTER, ACTING CITY ENGINEER TO ATA UL HAQ

19th August, 1955.

18th August, 1955.

Mr. Ata-ul-Haq, P.O. Box 2809, NAIROBI.

Dear Sir,

Ofafa Estate, Stage 1, Part 'B' Contract N.73.

Some of your blocks are now due for maintenance repairs under the conditions of the contract. Do you wish to carry out this work as each block falls due, or to deal with the whole contract at a later date. I should be grateful if you would let me know.

Yours faithfully,

ACTING CITY ENGINEER.

RFM.

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# LETTER, ACTING CITY ENGINEER TO ATA UL HAQ

19th August, 1955

Mr. Ata-ul-Hag. P.O. Box 2809. NAIROBI.

Dear Sir,

Ofafa Estate, Stage 1, Part 'B' Contract N.73.

10 Thank you for your letter dated 11th August, 1955.

I shall be informing you in the near future why the Council is not willing to accept the blocks you have recently constructed. Furthermore, I must inform you that you have been paid all monies due to you under the terms of the contract. Your deposit can only be refunded when the Final Certificate is issued. The Penultimate Certificate has yet to be issued.

Yours faithfully,

RFM.

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ACTING CITY ENGINEER.

P.O. Box 613.

NAIROBI.

#### EXHIBIT 45

## LETTER, ATA UL HAQ TO CITY ENGINEER.

Office:-Near Johns Garage.

To The City Engineer,

Dear Sir,

Ofafa Estate, Stage I, Part B Contract No.73

I acknowledge your letter CE 3669/M/W/9/N/73 of 19th August.

I am quite unable to understand why the remaining blocks have not been accepted. The work was completed under the supervision of and to the satisfaction of your architect and your clerk of works on the site. They were finally inspected by your representatives and all necessary repairs completed to their satisfaction, all this took place many months ago and still, without any reason Exhibits

44.

Letter, Acting City Engineer to Ata Ul Haq. 19th August, 1955.

45.

Letter, Ata Ul Haq to City Engineer. 23rd August, 1955 23rd August, 1955.

45.

Letter, Ata Ul Haq to City Engineer. 23rd August,

23rd August, 1955 - continued. being given, you are withholding payment. This is a breach of your liability under the Contract and I must insist on the payment due to me for work which has been completed, and the return of my deposit.

Yours faithfully,

ATA UL HAQ

46.

Letter, City Engineer to Ata Ul Haq. 6th September, 1955.

## EXHIBIT 46

## LETTER, CITY ENGINEER TO ATA UL HAQ

CITY COUNCIL OF NAIROBI,

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Departmental Reference: C.E. 3848/RFM/W/9/N/73.

Mr. Ata-ul-Haq, P.O. Box 2809, NAIROBI.

Dear Sir,

Town Hall,
Nairobi,
Kenya Colony.
6th September 1955.

Ofafa Estate, Stage 1, Part B.
Contract N.73

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Thank you for your letter dated 23rd August, 1955.

The blocks to which you refer are not satisfactory and the African Housing Architect has never agreed to accept them. You were informed that the Council were to hold an investigation to assess the quality of your work, and asked you to be present. The mortar for wall jointing was suspected of being well below the specified standard. Tests by the Public Works Department has since revealed that it is, and the results range for 1:4 mortar between 1:9.4 and 1:23.8, added to which there is strong evidence that the mortar contains impurities in the sand and has not been thoroughly mixed.

In answer to the points you raised with the African Housing Architect at the Town Hall on Friday the 26th August -

## Question 1.

Had the work been considered unsatisfactory at the time of building and brought to your notice

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by the Architect and Clerk of Works you would have rectified this.

#### Answer

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This is not entirely true - you are quite aware of the standard of work required, it is laid down clearly in your contract what standard is required and your first few blocks did within reason conform to this. I am also aware that you have carried out a considerable amount of work after normal working hours during weekdays and also at weekends, and it has often been covered up to avoid inspection.

#### Question 2.

You do not understand why your work should be condemned when other Council and Government Contractors have carried out inferior work.

#### Answer

This is not a relevant point to raise. I am only concerned with the work that you have contracted to do for the Council.

## 20 Question 3.

You do not want to go back on to the site to carry out major reconditioning to these buildings, only your normal maintenance work.

#### Answer

This then will have to be a matter for negotiation.

#### Question 4.

You claim that you have lost £12,000 over this contract.

#### 30 Answer

I am not clear by what you mean 'lost £12,000, anyhow I can assure you that the Council has lost a considerable amount of money on these buildings as they stand, they are well below their Contract Value.

A satisfactory conclusion will have to be reached concerning this contract. The matter has been brought to the notice of His Worship the Mayor and you should be informed shortly of the Council's decision.

Yours faithfully, (Sgd.) ? Saunders CITY ENGINEER.

#### Exhibits

46.

Letter, City Engineer to Ata Ul Haq. 6th September, 1955 - continued.

4.0

47.

Letter, Ata Ul Haq to City Engineer.

10th September, 1955.

## EXHIBIT 47

## LETTER, ATA UL HAQ TO CITY ENGINEER

10th September, 1955

The City Engineer, The City Council of Nairobi, Town Hall, NAIROBI.

Dear Sir,

Ofafa Estate, Stage 1, Part B, Contract No.73.

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I acknowledge receipt of your letter CE 3848/ RFM/W/9 N/73 dated the 6th September, 1955.

- 2. I shall be glad if you will inform me :-
  - (a) from which part of the work the samples of mortar were taken.
  - (b) the weight of each sample
  - (c) the identification procedure adopted.

I should also be glad of a copy of the Laboratory report on all samples submitted.

3. With regard to the list of questions and answers given in your letter, I must protest against the imputation of the last sentence of your first answer, and ask you to substantiate your statement that I covered up work to avoid its inspection. This statement is an accusation of deliberate attempt to deceive, and I am not prepared to let it pass.

In question 2 I did not mention about carrying out inferior work of other Council and Government Contractors. Your Architect questioned me about some cracks in the floor and I told him that such cracks should not be regarded a relevant factor of great importance in judging the standard of floor construction as such cracks are likely to appear on the settlement of works and would also be found where Council would apply their own direct labour which I invited your Architect to inspect with me and such cracks are generally repaired during the maintenance period.

Question 4. A brief reference as to the prob- 40 able size of the loss I shall sustain on this contract was made to the Clerk of Works but was not discussed with the African Housing Architect.

4. I have been put off with a series of excusos

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for the non acceptance of the final blocks of dwellings, comprising part of this contract, and I am now told that I shall be informed "shortly of the Council's decision". I should be glad to learn on what particular matter or matters the decision is to be made, and what precisely is meant by "shortly".

Yours faithfully, ATA UL HAQ.

#### Exhibits

47.

Letter,
Ata Ul Haq to
City Engineer.

10th September,
1955
- continued.

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#### EXHIBIT 48

## LETTER, CITY ENGINEER TO ATA UL HAQ

14th October, 1955

Mr. Ata Ul Haq, P.O. Box 2809, NAIROBI.

Dear Sir,

Ofafa Estate, Stage 1, Part B,
Contract N.73.

Thank you for your letter dated 10th Septem-20 ber, 1955. I apologise for the delay in answering this letter, which has been occasioned by my impression that the points raised had been already covered in subsequent discussion.

In answer to these points :-

- (a) The samples of mortar were taken from the external walling, above and below the floor slab of Blocks 30, 31, 35, 37, 38, 38A, 38B, and 39.
- (b) Each sample weighed approximately one pound.
- (c) Each sample was sealed in a sample bag immediately it was taken, and the Block number and Room number and position, whether above or below the floor slab, written on it. Added to this were the signatures of at least three witnesses.

I would remind you that either you or your son were present when these samples were taken. You will no doubt remember that you refused to sign the sample bags with the other witnesses, and that you refused to accompany an Officer of the Council's staff to the Public Works Department, to deliver the samples for chemical analysis.

48.

Letter, City Engineer to Ata Ul Haq. 14th October, 1955.

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48.

Letter, City Engineer to Ata Ul Haq. 14th October, 1955 - continued. It is a fact that work was carried out after the Council's normal working hours during week days and weekends, without Council's supervision, contrary to your Contract, having regard to the standard of the work carried out at these times, I should be grateful if you could give me a satisfactory explanation.

Furthermore there was an attempt at deception over the digging of the trial holes. Mr. Mould agreed to holes being dug, and when he went to inspect them, found that the mortar exposed was perfectly good. On enlarging the holes however, it was revealed that the good mortar was confined to the shape of the original hole, and nowhere else was mortar of this quality found.

I cannot answer your second point as the carrying out of inferior work by other Council and Government Contractors was most certainly brought forward by you as a circumstance mitigating your own work.

The figure of £12,000 as your loss over this contract was mentioned to the Acting African Housing Architect.

I am convinced that the reason for the non-acceptance of the final blocks of dwellings of this contract has been made quite clear to you, and I am not prepared to accept the imputation that a series of excuses has been made.

In conclusion I must ask you for a definite answer on this matter not later than Wednesday 19th instant, as to your willingness or otherwise to undertake the work necessary to put this Contract in order. Failing receipt of this answer by that date, I shall have to take such action as may be necessary in accordance with the terms of the Contract.

Yours faithfully,

CITY ENGINEER.

c.c. A.H.A.

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## LETTER, ATA UL HAQ TO CITY ENGINEER

Office:- Mear Johns Garage.

P.O. Box 2809, Nairobi. 15th October, 1955

The City Engineer, City Council of Mairobi, NAIROBI.

Dear Sir,

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# Ofafa Estate, Stage 1, Part B, Contract N.73.

I acknowledge receipt of your letter No. C.E. 4320/RFM/W/9/N/73 dated 14th October, 1955, and should be glad to receive a copy of the laboratory report on the samples of mortar taken from the walls of the Blocks listed in para (a). This document was requested by my letter of 10th September together with information which has been supplied in your letter under reference.

With regard to your penultimate paragraph, in which you state that you are convinced that the reasons for non-acceptance of the final blocks have been made clear to me, I do not think that, until the vital information concerning laboratory tests has been furnished to me, I can consider your remark to be wholly justified.

I do not consider that, having regard to the delay of over a month in replying to my letter of 10th September, you are acting fairly in insisting on a definite answer within five days as to my willingness to undertake the work you consider to be necessary to put the contract in order. I am unable to decide on my future course of action until either

- (a) all the information asked for in my letter of 10th September has been furnished to me
- or (b) you inform me that it is not your intention to supply it.

Yours faithfully, ATA-UL-HAQ.

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Exhibits

49.

Letter,
Ata Ul Haq to
City Engineer.
15th October,
1955.

#### EXHIBIT 50

50.

## LETTER, CITY ENGINEER TO ATA UL HAQ

Letter, City Engineer to Ata Ul Haq. 21st October, 1955.

Departmental Reference: C.E.4442/RFM/W/9/N/73 Town Hall, Nairobi, Kenya Colony. 21st October, 1955

Mr. Ata-ul-Haq, P.O. Box 2809, NAIROBI.

Dear Sir,

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Ofafa Estate, Stage 1, Part 'B' Contract N.73

I have received your letter dated 15th October, 1955.

The Public Works Department chemical analysis results which you request, are as follows:-

## Above Floor Slab

BTOCK	38	$\perp$	to	9.7	Mortar		
11	38A	1	to	4.3	11		
11	38B	1	to	4.4	11	•	20
11	38B	1	to	8.3	81		

## Below Floor Slab

	-					
Block	30	1	to	18	11	
9 <b>t</b>	30	1	to	14.8	ſî	
11	31	ī	to	16.1	11	
11	35	ī	to	16.2	<b>i1</b>	
tt	35	ī	to	10.8	it	
11	35	<u> </u>	to	16.4	ti	
fi	35	ī	to	9.4	îî	
\$1	37	ī	to	11.3	77	
11	38	ī	to	20.1	1 t	
11	38A	ī	to	23.8	11	
11	38A	ī	to	18.2	11	
tt	38A.	ī	to	12.5	17	
17	38B	ī	to	9.6	tt	
tt.	39	ī	to	9.5	î î	

You have now been provided with all the information you require. The conditions of my previous letter still apply. I must insist upon your decision being made definite by Monday, 24th October, 1955.

Yours faithfully, (Sgd.) A.B. Salmon, CITY ENGINEER.

## LETTER, ATA UL HAQ TO CITY ENGINEER

P.O. Box 2809, Nairobi. 22nd October, 1955

The City Engineer, City Council of Nairobi, NAIRCBI.

Dear Sir.

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Ofafa Estate, Stage 1, Part 'B' Contract N.73.

I acknowledge receipt of your letter No.C.E. 4442/RFM/W/9/N/73 dated 21st October, 1955.

In my letters of 10th September, 1955 and 15th October, 1955, I asked for a copy of the laboratory report on all the samples submitted. Your letter under reference gives only results of the tests carried out on some of the samples submitted. It would expedite this matter if you would be good enough to let me have copies of the laboratory report on all samples submitted, or alternatively authorise the Materials Engineer of the P.W.D. to supply these to me.

Your insistence on my decision by the 24th October, 1955 does not accord much what appears to be your reluctance to furnish me with full particulars of the test on samples.

Yours faithfully, ATA-UL-HAQ.

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#### EXHIBIT 52

#### LETTER, CITY ENGINEER TO ATA UL HAQ

29th October, 1955

Mr. Ata Ul Haq, P.O. Box 2809, NAIROBI.

Dear Sir,

Ofafa Estate, Stage 1, Part 'B', Contract N.73.

I have received your letter dated 22nd October, 1955.

On the 15th October 1955, you wrote asking

#### Exhibits

51.

Letter, Ata Ul Haq to City Engineer. 22nd October, 1955.

52.

Letter, City Engineer to Ata Ul Haq. 29th October, 1955.

52.

Letter, City Engineer to Ata Vl Haq. 29th October, 1955 - continued. for the laboratory report on the samples of mortar taken from the walls of Blocks Nos. 30, 31, 33, 37, 38, 38A, 38B and 39. These results were included in my letter of the 21st October 1955, reference C.E. 4442/RFM/W/9/N/73. I fail to see the reason for your letter of the 22nd October, 1955.

I must remind you that your final decision was to have been made known to me by Wednesday 19th October, 1955. It was deferred to Monday, 24th October, 1955.

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In view of the fact that I have not received your decision I must inform you that it is my intention to take such action as may be necessary in accordance with the terms of the Contract.

Yours faithfully,

CITY ENGINEER.

53.

Letter, Sirley & Kean to City Engineer.

14th November, 1955.

EXHIBIT 53

## LETTER, SIRLEY & KEAN TO CITY ENGINEER

14th November, 1955

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City Engineer, City Council of Nairobi, Town Hall, NAIROBI.

Dear Sir,

Re: OFAFA ESTATE
Your letter Ref. CE.4524/RFE/W/9/N/73 of
29th October, 1955 refers

Kindly note that we have been instructed to act on behalf of Mr. Ata Ul Haq in reference to the contracts of building of African Housing and in which you have raised certain issues.

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Our Client does not accept, nor is he in a position to agree to the actions and submissions which you have made in this matter and has instructed us to act jointly with Mr. S. McConnel, Consulting Engineer, in this matter.

Before we can proceed with the actual issues it would be appreciated if you could give an appointment for Mr. McConnell to meet you and discuss the technical issues arising in this case.

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Kindly advise earliest as this matter is of the utmost urgency.

Yours faithfully, SIRLEY AND KEAN, Sgd. Partner.

#### LETTER. CITY ENGINEER TO ATA UL HAQ

Mr. Ata Ul Had. P.O. Box 2809. MAIRORI.

Dear Sir.

Ofafa Estate, Stage 1, Part 'B', Contract N.73.

In view of the breakdown of recent negotia-10 tions I must inform you that it is my intention to complete the above contract as laid down in my letter of the 29th October, 1955. I have instructed Council's Direct Labour Organisation to proceed immediately with this work.

Please accept this letter as due notice to this effect.

Yours faithfully,

CITY ENGINEER.

## EXHIBIT 55

20 LETTER, SIRLEY & KEAN TO CITY ENGINEER

28th November, 1955

The City Engineer, City Council of Nairobi, Town Hall. WAIROBI.

Dear Sir.

Re: MR. ATA UL HAQ YOUR LETTER REFERENCE CE.5237/ABS/DH/9/N/73 of 19.11.1955 refers

We would refer to your above-mentioned letter and to ours of the 14th November and have now received the report from the Consulting Engineer acting on behalf of our Client to the effect that he has consulted your offices in the matter of African Housing.

It was found there are some serious defects in the design and specification which are not the responsibility of the contractor, our client, and we are to state that our client does not agree to the attempt of your Council to repudiate the former Exhibits

54.

Letter. City Engineer to Ata Ul Hag.

(Undated)

55.

Letter, Sirley & Kean to City Engineer. 28th November.

1955.

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55.

Letter, Sirley & Kean to City Engineer. 28th November, 1955 - continued.

City Engineer's certificates and that the remaining blocks are ready for taking over and therefore the penultimate certificate giving our Client 95% of the contract price should be issued.

Our Client will deal with any repairs at the end of the maintenance period, for which your Council has made ample provision by retaining 5% of the contract until the expiry of that period.

In view of the above, we are to state that unless we receive the necessary certificates and payments within fourteen days of the date of this letter our instructions are to take necessary action without further notice to you.

> Yours faithfully. SIRIEY & KEAN. Sgd. Partner.

56.

Letter, Sirley & Kean City Engineer. 29th November, 1955.

## EXHIBIT 56

Princes' House, Government Road, Nairobi,

P.O. Box 5018. 29th November, 1955.

The City Engineer, City Council of Nairobi. Town Hall, Nairobi.

Dear Sir,

BS/2175.

Re: Mr. Ata Ul Haq Your letter reference C.E.5237/ABS/DH/9/N/73 of 19.11.1955 refers

Further to your above referenced letter and ours of the 28th November, our client now advises us that your Council has proceeded with certain works on the premises which our client has completed under the contract and we are to state that our client considers your action to be improper and the apparently extensive alterations unnecessary, not coming within the original contract.

We are further to state that our client will hold you responsible for any loss which may result from this unilateral action and we would appreciate if you would let us know the intention of the Council in this matter.

ES/KB

c.c. S.McConnell, Esq, Mr. Ata Ul Hag.

Yours faithfully, SIRIEY & KEAN. Partner.

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## LETTER, CITY ENGINEER TO SIRLEY & KEAN

5th December, 1955

Messrs. Sirley & Kean, P.O. Box 5018, NAIROBI.

Dear Sirs,

Ofafa Estate, Stage 1, Part 'B' Contract No.73 - Mr.Ata Ul Haq.

I refer to your letter of 28th November, 1955 reference BS/2175.

It has been noted that your Consulting Engineer has advised you that there are some serious defects in the design and specification which are not the responsibility of the Contractor. As it is not known to what this refers, it is impossible for me to deal with this unless you particularise.

I have no intention of taking over the remaining blocks as they stand or to issue the consequent penultimate certificate. It is a fact that these buildings do not conform to the standard laid down in the specification, as your Consulting Engineer saw for himself when he inspected them.

Yours faithfully,

CITY ENGINEER.

Princes' House.

NAIROBI. P.O. Box 5018.

Government Road.

10th December, 1955.

#### EXHIBIT 58

## LETTER, SIRLEY & KEAN TO CITY ENGINEER

SIRLEY & KEAN, Advocates.

Advocates.

BS/2175.

The City Engineer, City Council of Nairobi, Town Hall, NAIROBI.

Dear Sir,

Re: Ofafa Estate - Mr.Ata Ul Haq - Your letter Ref: C.E.5398/M/DH/9/N/73 of 5.12.1955.

We are in receipt of your above-mentioned letter and are instructed to advise you that so far as

#### Exhibits

57.

Letter, City Engineer to Sirley & Kean. 5th December, 1955.

58.

Letter, Sirley & Kean to City Engineer. 10th December, 1955.

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58.

Letter,
Sirley & Kean
to
City Engineer.
10th December,
1955
- continued.

defects in the design and specification are concerned, they are not at the moment in issue and we are not to proceed with this matter at this stage.

We are, however, instructed to draw your attention to the fact that apparently certain demolitions are taking place on the buildings in which the joints of the buildings are being destroyed with crowbars and that our client will hold you responsible for the damage caused.

We are still awaiting information as to what payments your Council proposes to make at the present stage, particularly in view of the fact that apparently some of the blocks which you claim are subject to an issue are, since this correspondence started, occupied.

Yours faithfully,

BS/KS.

Partner.

59.

1955.

Letter, S.McConnel to City Engineer. 5th December,

## EXHIBIT 59

## LETTER, S. McCONMEL TO CITY ENGINEER

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S.McConnel, B.Sc.(Eng.) M.Inst.G.E., Consulting Engineer, P.O. Box 2408.

5th December, 1955

The City Engineer, Town Hall, NAIROBI.

Dear Sir,

# AFRICAN HOUSING CONTRACT: ATA-UL-HAQ

Of the 17 Blocks comprised in this Contract you have already taken over the following:-

Nos. 25,26,27,28,29,31,32,33,34,35 and 36.

Three further Blocks viz. 30, 37 and 38 are now being partially occupied although no notice of acceptance has been received.

Would you kindly clarify the position as soon as possible?

The Blocks have been inspected recently by two other technical experts in addition to myself and the work carefully examined.

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We were very surprised to see the heavy hacking which was taking place at the joints involving in some cases cutting away the stones themselves and damaging the timber work.

Yours faithfully,

S. McConnel.

Copy to:--

Messrs. Sirley & Kean, Advocates.

10 Mairobi.

## Exhibits

59.

Letter, S.McConnel to City Engineer.

5th December, 1955

- continued.

## EXHIBIT 60

## LETTER, CITY ENGINEER TO S. McCONNEL

13th December, 1955

S.McConnel Esq., B.Sc.(Eng.), M.I.C.E., P.O. Box 2408, NAIROBI.

Dear Sir,

# Ofafa Estate, Stage 1, Part 'B' Contract N.73 - Mr. Ata-Ul-Haq.

I refer to your letter dated 5th December, 1955 and to your meeting with the Deputy City Engineer on the 7th December, 1955.

It is noted that you allege:-

1. that the Council's labour is using crowbars to rake out the mortar joints.

In fact, they are using raking-out tools supplied by the Building Works Superintendent. These are about 18 inches long and hooked at one end.

30 2. that the Council's labour is raking out the joints to a lesser depth than the Contractor was required to do.

I must ask you to refer to the original conditions for this work where you will notice that I require all defective internal bagwiped joints to be raked out to a depth of one inch. The depth actually raked out, in most cases, exceeds this and is nearer two inches. In some cases the mortar is so weak it completely runs out of the joints when being raked.

60.

Letter, City Engineer to S.McConnel.

13th December, 1955.

Exhibits 60.

Letter,
City Engineer
to S.McConnel.
13th December,
1955
- continued.

3. that the Council's labour is damaging the stone in the process of raking out.

This appears to be a gross exaggeration; in some cases the stone has been chipped. This is unavoidable as the stone laid by the Contractor is not regularly coursed and the projections into the run of the joint get caught as the labourers rake out.

4. that in raking out the joints the Council's labour is damaging the timber.

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I have found no evidence of this.

5. that Blocks Nos.30, 37 and 38 have been partially occupied.

This is correct. They are occupied by Council's labourers who are working on the site and are housed free of rent. I fail to see your purpose in raising this particular point as a technical adviser.

Yours faithfully,

CITY ENGINEER.

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Report on Work by Mr. A.E. Wevill 21st August, 1956.

## EXHIBIT 61

REPORT ON WORK BY MR. A. E. WEVILL

CITY COUNCIL OF MAIROBI

AFRICAN HOUSING, OFAFA ESTATE, NATROBI

PART "B" - BLOCKE NOS.25 to 39

## REPORT on COMDITION OF WORK

and DEFICIENCIES IN WORKMANSHIP based on SITE INSPECTIONS made from APRIL, 19th to APRIL, 30th,
1956, AND SUMMARY OF ESTIMATED COST OF REINSTATEMENT to conform with SPECIFICATION REQUIREMENTS,
or to raise STANDARD.

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## I. FOUNDATIONS

#### 1. EXCAVATION:

Specification Provides:-

- (a) Rock to be removed with wedges or levers.
- (b) Excavation over the whole area to be down to rock or murran suitable for foundations.

- (c) Black cotton soil to be entirely removed before foundations or filling are proceeded with.
- (d) Trenches for foundations to be down to solid rock or murram and levelled off before laying concrete.
- (e) The Contractor to allow for the foundations to have four courses of walling between top of concrete foundations and underside of concrete floor slab. Any greater or lesser depths of excavation to be the subject of a Variation Order adjusting the difference.

#### Tests and Findings: --

(a) Forty six test holes and several trenches alongside of the outer faces of walls were dug and inspected.

It was found that the nature of the ground conststed of a layer of black cotton soil about 2'6" to 3'0" deep overlying a boulder bed, the upper surface of which bed is composed of loose, soft weathered rock fragments and finer material, in some cases with an admixture of black cotton soil. This upper surface varied in thickness and in places occurred in the form pockets between rock outcrops.

Sub-soil water has drained into most of the holes to a considerable depth.

(b) Examination of the trenches and the test holes indicated that excavation had not been cut below the upper surface of the loose weathered bed, quite appreciable depths of the soft loose material (some of it with a considerable admixture of black cotton soil) remains under the concrete foundations, rock outcrops occur above these surfaces and the bottoms of the trenches are not level.

In view of the provision for payment to be made in respect of any increased depths of foundations there appears to be no reason why the trenches should not have been dug down to harder bearing surface.

#### CONCLUSIONS:

Although the trenches have not been cut down to the rock surface and levelled off as specified the bearing capacity of much of the trench bottoms probably would have been adequate to carry

# Exhibits

61.

Report on Work bу Mr.A.E.Wevill. 21st August,

1956

- continued.

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61.

Report on Work by Mr.A.E.Wevill. 21st August, 1956 - continued. the comparatively small superimposed load but the sub-soil moisture content will vary so much with seasonal changes that unequal settlement may be expected, particularly where black cotton soil has been left and between the harder and softer surface. This will result in fractures in the concrete foundations and the walling above them. The only remedy for this is underpinning of the weak places.

## 2. CONCRETE FOUNDATIONS:

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Specification provides :-

- (a) The concrete in foundations to be a 1-3-6 mix of cement and sand aggregate.
- (b) Allowance to be made for any additional concrete to stepped foundations.
- (c) The drawings show concrete foundations 18" wide and 6" deep with a projection of 6" on either side of the 6" thick walling built off them.

## Tests and Findings:-

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- (a) The concrete in the foundations which was exposed in the test holes is of varying quality and hardness, much of it being soft and easily broken. This indicates a weaker mix, faulty mixing or, that it has been allowed to stand too long between mixing and placing.
- (b) Where the test holes exposed rock outcrops, the concrete footings have not been stepped over these, in fact cases occur of the walling being notched over the rock and bedded directly onto this on a thin bed of mortar.

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(c) Where the concrete foundation was exposed it was found to vary in thickness. This indicates that the bottoms of the trenches have not been levelled as specified. It was also found that the concrete did not project beyond the face of the walling building off it the uniform 6" shown on the drawings. In some cases there was no projection, in others it projects considerably more than 6" and generally the outer edge of the concrete is broken and irregular. This indicates that the width of the concrete is less than 18" or that mistakes have been made in the setting out.

The consequences of the foregoing are that the loading is unevenly distributed or is concentrated on a lesser area than as designed and, taken with the unequal thickness, the unequal settlement previously referred to will result in fractures in the concrete.

#### CONCLUSIONS:

The concrete generally falls short of the requirements of the specification and, although it might be considered adequate as a levelling bed off which to build the walling on a good rock or murram sub-base, uneven settlement due to the inadequate bearing capacity of the sub-base will result and fractures at points of settlement where the weaker concrete exists will occur. A good 1-3-6 mix properly maintained in position to the required width and depth would have provided a bridging over these points and have reduced the risk.

Again, the only remedy is under-pinning and cutting out and re-placing soft concrete.

#### 3. FOUNDATION WALLING

Specification provides :-

- (a) The stone to be first quality local stone with all corners square and regular.
- (b) The walling to be in  $9\frac{1}{2}$ " courses, centre to centre. The Contractor to allow for four courses of stonework from the top of the concrete foundations to the under side of the concrete floor slab. Greater or lesser depths to be the subject of Variation Orders adjusting the differences.
- (c) The walling to be built in cement mortar consisting of one part of cement to four parts of sand up to ground floor level. All mortar shall be mixed in a rotary mixer and to be used directly after mixing.
- (d) All walling shall be reinforced in each alternative course with  $\frac{3}{4}$ N wide hoop iron No. 20 B.W.G.
- (e) The drawings show buttresses carried down the full depth to the top of the concrete foundations.

#### Tests and Findings :-

(a) The walling exposed at the test holes and

#### Exhibits

61.

Report on Work by Mr.A.E.Wevill.

21st August, 1956 - continued.

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61.

Report on Work by Mr.A.E.Wevill. 21st August, 1956 - continued. trenches is, in many places, built with irregular shaped stones and stones of unequal depth, resulting in excessively wide joints and thick beds. Some soft and porous stone has also been used and at one test hole it was found that stone chips and rubble had been used to make up the thickness of the joint. The depth from underside of floor slab to top of concrete footings at the points exposed is mostly four courses but varies in places to between three and five courses.

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- (c) The mortar tested varies considerably from soft and easily raked out to fairly hard, but is mostly soft. This indicates either a weaker mix than 1-4, poor mixing or that the mortar has been allowed to stand too long after mixing before being used or has been re-mixed.
- (d) No hoop iron bond is visible at the places 20 tested.
- (e) Buttress foundations where exposed, in many cases start off the concrete floor or at one course below the floor and do not rest on the concrete foundations.

#### CONCLUSIONS:

The walling falls short of specification requirements as much of the stone used is of irregular shape and size and is not square on all corners, also inferior and soft stone has been used in places. The mortar is so variable in quality as to render it's binding value unreliable.

There are many unduly thick beds and joints and the walling as built offers little resistance to the effects of subsidence in the subsoil and fracture in the concrete foundations. Walling built in accordance with the specification would have mitigated against this to some extent as an arching effect over the settlement points would have been created.

Had advantage been taken of the provision for payment for walling in excess of four courses deep and the trenches been taken down to a lower and harder level wherever soft ground was found, the resulting foundations would have been more satisfactory.

Some re-pointing has been done to the external faces in places. The only remedial measures which appear to be possible now are raking out joints and re-pointing and under-pinning. The whole of the external face of the walling below ground should be exposed, the jointing raked out at least 1½" deep and flush pointed in cement mortar (1-4). Where the digging down to expose the walling also exposes weak or unduly soft concrete or subsoil, the excavation should be taken down to a harder stratum and concrete under-pinning inserted. In filling back after the re-pointing has been completed a hard core fill should be used where steps or concrete drains abut the walls.

# Exhibits

61.

Report on Work by Mr.A.E.Wevill. 21st August, 1956

- continued.

## II. FLOORS AND FILLING UNDER

Specification provides:-

- (a) All black cotton soil to be removed and the excavated area shall be free of black cotton soil before filling proceeds.
- (b) Filling under the ground floor slab to be approved hard, dry, broken stone in layers not exceeding 6" and each layer rammed.
- (c) Concrete floors to be 1-3-6 mix, consolidated to the thickness shown on drawings, laid to form a monolithic slab and screeded to falls. Drawings show floors 3" thick concrete and ½" thick screed.
- (d) Cement floors to consist of 1th finishing coat of cement and sand (1-4) brought to a smooth hard surface with a steel trowel.

## Tests and Findings :-

(a) Test holes were cut through the floors inand side rooms in six out of the seventeen blocks

(b) and the filling under was removed. In each case the filling consisted of large boulders up to 2'0" long of irregular shape with considerable voids between and was finished off with a layer of finer material immediately under the concrete floor, this layer varying in depth between 3" and 6". In no case had the excavation been carried down to the rock and pockets consisting of the upper soft rock stratum with an admixture of black cotton soil and some neat black cotton soil were found under the filling. Water had

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61.

Report on Work by Mr.A.E.Wevill. 21st August, 1956 - continued. percolated through the walling and was standing to quite a considerable depth in the filling. It is obvious that little or no attempt at ramming could have been made as the size of the stone ballast used rendered it impossible to do so in 6" layers as specified. Such filling particularly as it contains standing water, is bound to move, more particularly on account of the variation in water content at seasonal changes.

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- (c) The concrete floors where cut, vary in thickness from 2" to 3" thick and the concrete varied in quality, most of it being easily broken.
- (d) The screed was found to be from  $\frac{1}{2}$ <sup>n</sup> to  $\frac{3}{8}$ <sup>n</sup> in thickness and is mostly reasonably hard.

Each floor in every block was inspected and all had cracks or showed signs of cracks which had been repaired. Some had been entirely refloated and cracks were again appearing. The surface of a number of floors was pitted. Damp patches appeared in some of the floors.

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## CONCLUSIONS:

The fact that test holes were made in blocks some distance away from each other and that cracks have occurred in all floors throughout all the blocks are reasonable grounds for the assumption that the type of filling which was exposed where the floors were opened up is similar throughout and that the cause of cracking, irrespective of possible weakness in the concrete, lies in the filling.

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No matter what repairs are made to the floors themselves, no permanent cure can be effected until they are all taken up, the filling removed, all black cotton soil dug out and new filling which conforms to the specification done and the floors re-laid. Before filling back any weak mortar exposed on the inner faces of the foundation walling should be raked out and the walls re-pointed.

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# III. SUPERSTRUCTURE WALLING.

Specification provides :--

(a) Only first quality local stone, quarry dressed with all corners square and regular, is to be used. All courses throughout to

be  $9^{1}_{2}$  centre to centre, built in cement mortar (1-6) above ground floor level.

- (b) All walling should be reinforced in each alternate course with  $\frac{3}{4}$  hoop iron No.20 B.W.G.
- (c) Approved three ply bituminous felt damp course, set in hot bitumen, laid on a cement screed, to be provided in all walls immediately above finished floor slab level.
- (d) External faces of walls, where colour washed and internal wall surfaces of rooms to be bag wiped. Walls to be bag wiped shall be dressed off to a fair face before wiping to remove all projecting stone faces and bag wiped joints shall be left flush with the stonework and free from ledges, voids and interstices and shall present a flush unbroken surface. Remaining external faces of walling not colour washed, shall have struck joints. Cement mortar is not to be used to level off faces of walling, which is to be left rough.
- (e) Allow for forming chamfered edges to window openings.
- (f) Build flues in chimneys and parge in 1-6 cement mortar.
- (g) Form steps in medium chisel dressed stone set in cement mortar (1-4) on hardcore back filling.
- (h) Boundary walls to tie in directly below the underside of stone corbels.

## Tests and Findings :-

(a) The walling contains a very considerable quantity of irregular shaped stones with corners out of square and stones of unequal This has resulted in joints of exceptional width to make up between stones with corners out of square, although these wide joints have also occurred in other places where the adjoining stones are comparatively square. To enable the  $9\frac{1}{2}$ " standard course to be maintained the beds are of unequal thickness and in many cases out of level and true alignment. Beds  $2\frac{1}{2}$  thick and joints  $2\frac{3}{4}$  wide can be found in many places. Many soft stones of inferior quality and of a porous nature, which are liable to disintegrate, have also been used.

## Exhibits

61.

Report on Work by Mr.A.E.Wevill. 21st August, 1956 - continued.

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61.

Report on Work by Mr.A.E.Wevill. 21st August, 1956 - continued. The mortar varies considerably but in most cases where it was tested after the pointing had been removed it is soft and can be raked out easily.

There are a number of straight joints at window and louvre sills. Cracks have appeared, some of which have been repaired by re-pointing.

- (b) Tests were made for the presence of hoop iron bond. In most places tested it is absent and such few places where it was found, more often than not it is not repeated in alternate courses. That found is thin baling iron about ½" wide and is not as specified.
- (c) In places where the damp course was exposed it was found to be thin and is not three-ply material also it does not appear to have been set in bitumen on a screeded bed.
- (d) The internal faces of walling to rooms bore no appearance of having been dressed off to a fair face and do not by any means present a flush unbroken surface. On the contrary they are rough with considerable ledges, depressions and voids.

An attempt has been made to remedy this in some of the rooms by re-pointing and making up the rough surfaces with cement mortar. Where the latter has been done the amount of mortar used is almost the equivalent of plastering.

The external faces which were to be struck jointed have the mortar at the beds and joints smeared on and finished with a sunk ruled joint, the finish presents a most untidy appearance which bears little resemblance to struck pointing. The pointing around door, etc. frames is particularly rough and in places is showing signs of breaking away.

This inferior pointing, combined with poor mortar and wide beds and joints, results in walling which presents little resistance to the penetration of driving rain. A considerable amount of re-pointing to the external facing has been done to some of the blocks and to others the beds and joints have been raked out preparatory to re-pointing. The ends of the division walls to the cubicles in the ablution blocks are shown

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to be fair faced and pointed. They have been plastered between the door frames and in many places the plaster has cracked and is falling away.

- (e) No chamfered edges have been formed at any of the window openings.
- (f) The flues to the cook rooms have been partly parged in some places but are mostly left rough.
- (g) Steps in many places, if provided have sunk and are not visible. No hard core back fill down to the concrete foundation was present in places where tests were made.
- (h) Boundary walls do not appear to be bonded into the walls of the buildings and in many places open joints are visible at these points.

## CONCLUSIONS:

The conclusions drawn in respect of the nature of materials and workmanship in the construction of the foundation walling applies equally to this portion of the work.

Cracks have occurred and more may be anticipated, particularly in view of the suspected absence of hoop iron bond and the prospect of settlement in the foundations.

Some dampness due to penetration of driving rain may also occur.

In the interests of hygiene the internal walls cannot be left in their present condition and the defective pointing to the external faces should also be remedied and, in the case of the external faces the beds and joints should be raked out to a depth of 12" and re-pointed in 1-4 cement mortar with a proper struck joint. In the case of the internal faces the rough stone faces should be dressed off to a fair face, the joints raked and flush pointed in 1-4 cement mortar and again bag-wiped and lime washed.

Cracks due to the poor mortar, foundation movement or the absence of hoop iron bond should be pointed up and if necessary owing to their recurring, the beds of the walling should be chased and iron cramps should be inserted. The ends of division walls should be clean dressed and flush pointed.

#### Exhibits

61.

Report on Work by Mr.A.E.Wevill. 21st August, 1956 - continued.

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61.

Report on Work by Mr.A.E.Wevill.

21st August, 1956 - continued. The damp course will deteriorate rapidly but the only remedy would be to cut through the walling in sections and insert a more permanent material. The cost of doing this would be prohibitive and the only answer is a claim for reduced value.

A chamfer to form a weathering should be cut on the outer face at all sills. The pointing around aoor, etc. frames can be dealt with when the external and internal faces are re-pointed.

The lack of parging to the flues is not a serious matter from the point of view of smoke disposal, as most of the cooking is done on charcoal braziers. The roughness will impair their efficiency as extract ventilators and may provide objectionable harbouring places but there is little that can be done about this now without pulling down and re-building the chimneys which is hardly warranted.

The hardcore back fill under steps can be provided when back filling after re-pointing the external face of foundation walling but the steps will have to be re-set.

Wrot iron cramps, three to the height, should be inserted as a tie at the junction between the boundary walls and the buildings.

### IV. ROOFS AND JOINERY

### Specification provides:-

- (a) Carpenter's work to be framed and trussed up in the best possible manner with all necessary straps, screws, etc. as shown on the drawings. All rafters, etc. to be sawn and truly fitted and well spiked together. Posts and tie beams to be housed together. Frame up roof as shown on drawings..... all properly framed together. The drawings show wall plates on top of the inner wall between the Living Rooms and Cook places and Verandahs.
- (b) Down each side of valley on top of valley rafter and on backs of jack rafters provide and fix 9" x 1" valley boards, one edge splayed and 2" x 1" fillet planted on each side. Line the valley gutters with 24 gauge galvanised sheet iron, laying 3" on flat and turned up under tiles and over tile battens for 7½" minimum.

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(c) Doors and window frames to be fixed with metal cramps.

(d) Hang all doors on one and a half pairs of 12" strap hinges. Hang all window shutters on one pair of 9" strap hinges. All strap hinges to be secured with one bolt and screws. Hang ablution doors on one and a half pairs of 9" strap hinges set to close door automatically. All the above to be of good, strong pattern.

# Exhibits

61.

Report on Work by Mr.A.E.Wevill. 21st August, 1956 - continued.

## Tests and Findings:-

(a) The roof timbers are lap jointed and nailed with wire nails, none are framed, screwed or even halved at joints and the nails used are insufficiently long to go right through the timbers so that they may be clenched on one face.

The joints between the timbers are opening and some distortion and sagging in the roofs has taken place. Some reinforcement has been provided in the form of a brace at the apex where the rafters meet the ridge and in the ablution blocks extra tie beams have been put in to the rafters which have no collars.

No wall plate has been provided on top of

(b) The valleys are formed with two 6" x 1" valley boards butted against each side of the valley rafter and have no fillets on the upper edges. They are lined with galvanised sheet iron ridging about 15" girth. (not 18" as specified).

the inner division walls.

(c) The only fixing for door frames, where it can be seen to be used, is thin, flat baling iron, not proper metal cramps. If any has been used for fixing window or louvre frames it will probably be of the same material. The frames to the ablution cubicle doors are nailed together through the walls with wire nails and are coming loose in many places.

Hinges throughout are plain Tee hinges, fixed with screws without any bolts and those to the ablutions are not self-closing.

#### CONCLUSIONS:

Weakness in the jointing of the timbers has

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61.

Report on Work by Mr.A.E.Wevill. 21st August, 1956 - continued. and will continue to result in distortion and spread in the roof timbers. The omission of the wall plate on top of the front division walls of the rooms will also be a contributory factor.

The remedies which can be provided most conveniently now are to provide a collar to each pair of rafters which have no collar at present and to brace each pair of rafters at apices under the ridge. The joints between the rafters and the new collars and braces should be halved and clench nailed and all of present lapped joints to the timbers should be re-nailed with not less than  $4\frac{1}{2}$  long nails with ends clenched. A wall plate with hoop iron or bolts securing it should be provided on division walls at the front of the rooms and all the rafters should be securely nailed to this. Valleys with boarding and fillets and galvanised iron linings as specified could be substituted for those provided. This may not be necessary unless undue leakage takes place but if it is not done, a reduction should be claimed for the lesser cost of the valleys as executed.

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All door etc. frames should be taken out, proper iron cramps (three to each door jamb and two to each window and louvre jamb) provided and the frames re-fixed and properly bedded and pointed. Some of the frames in the ablution rooms have been bolted together through the division walls. This could be done to the remainder of the ablution room doors without necessitating taking them out.

Self-closing hinges should be provided in substitution of the present Tee hinges to all ablution room doors and one bolt should be provided to each Tee hinge on the remaining doors and shutters.

#### V. CONCRETE DRAINS

Specification Provides:-

#### Sullage Drains:-

The Contractor to allow for excavating for and providing and laying drain blocks (1-3-6) to falls as directed on a 3" murram bed also for any building up under the channels as directed. The drawings show a hard core fill to the foundation trench on the outer face of foundation walling.

## Tests & Findings:-

The drains have settled in many places or have not been laid to adequate falls and water stands in them.

In places they have fallen away from the wall face and the open joint so formed has been made up in cement. Several lengths have broken and the jointing between the blocks has opened up, particularly at junctions. The branch drains to the roads and sewer have settled and cracked in many places, which indicates that the specified building up under them has not been done.

In places where the ground was opened up alongside of the drains no hardcore back fill had been put in.

The cement finish to the drains has disintegrated in several places. Further movement in the drains may be expected due to seasonal changes.

### CONCLUSIONS:

Where water stands in the drains they should be taken up, all cotton soil beneath them removed, back fill or building up provided and they should be re-laid to proper falls. Broken lengths of drain and drains to which the cement finish has disintegrated should be taken out and re-placed.

#### VI. REPAIR ETC. WORKS ALREADY CARRIED OUT

The City Council have already carried out some of the repairs called for in the foregoing and other work in investigations. These consist of raking out and repointing interior and exterior wall faces, reinforcing roof timbers, repairs to floors, digging and filling back test holes and trenches and sundry repairs to doors, shutters and roof tiling.

#### VII. SUMMARY

Based on the foregoing the following are my findings upon which I consider claims against the Building Contractor can be substantiated:-

# "A" Estimated Cost of repairs and reinstatement under Heads I to VI

I. Foundations. (To improve Standard). Excavate to outer face of walling and for underpinning, concrete underpinning,

#### Exhibits

61.

Report on Work by Mr.A.E.Wevill. 21st August, 1956 - continued.

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Exhibits	I. Foundations (Contd.)			
61. Report on Work	raking out and re-pointing walls and back filling to trenches	Shs.	39,000.00	
by Mr.A.E.Wevill.  21st August, 1956  - continued.	II. Floors (To bring up to Specification standard) Hacking up existing concrete floors, taking out filling, cleaning out black cotton soil, re-filling and ramming and laying new concrete floors and floating		310,000.00	10
	III. Superstructure Walling.			
	<ul> <li>(a) Raking joints and re-pointing externally (to improve standard)</li> <li>(b) Dressing off, re-pointing and bag washing internal faces, taking out and re-fixing door etc. frames, cutting chamfer</li> </ul>	11	18,600.00	
	at sills, bonding boundary walls, etc. (to specification			20
	standard). (c) Damp Course (reduced value)	11	206,000.00	
	Reinforcing and re-spiking roof timbers (to improve standard)	tı	23,500.00	
	Bolting hinges and new hinges to doors etc. (to bring up to specification standard).	tt	5,800.00	
	Valley boarding and lining (reduced value)	ti	700.00	
	V. Drains (to bring up to specification standard)			30
	Taking up and re-laying and re- placing defective drains and providing support	ti	2,000.00	
	VI. Repair Work carried out by City Council			
	Cost of repairs and investigations already carried out (less work to roofs, re-pointing and decorations)	11	15,000.00	
	Total value of Repair, etc. Works:-	Shs	.621,400.00	40

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## "B" Loss of Rent.

The rooms must be vacated whilst the works under headings I to VI are being done. They should therefore be vacated in blocks of about twenty rooms at one time and the time required to do the work would be about one month per block. There are 456 rooms, let at Shs.39/per room per month. The rent loss would thus be

Shs. 17,784.00

This does not make any Note:allowance for rooms unoccupied from the date the Contractor left the work up to the time when repairs are commenced.

## "C" Maintenance.

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If the repairs scheduled are carried out, 20 charges for maintenance should not exceed the normal 12% per annum applicable to this type of property except for the risk of subsidences in the foundations entailing further underpinning. An addition of 1/8th% per annum should cover this The capital value of this item can be more properly calculated by the City Treasurer using the formula applicable to other City Council properties.

# "D" Depreciated Value.

30 The normal useful life of this type of building is usually calculated at 40 years. Most buildings of permanent structure, such as these, if reasonably well maintained, will outlive this period. It is more than probable that at a much earlier date a better type of accommodation will be demanded and these will become obsolete.

A claim under this heading would therefore be debateable and would certainly be challenged. In view of the claim for extra maintenance charges it would not be advisable to enter this claim.

Dated: 21st August, 1956.

A.E. Wevill,

F.R.I.C.S.

#### Exhibits

67.

Report on Work Mr.A.E.Wevill. 21st August, 1956 - continued.

# EXHIBIT 64

# REPORT ON EXTRA WORKS BY MR. C.W. NEWLYN

Exhibits

64.

C.W. NEWLYN, A.R.I.C.S., CHARTERED QUANTITY SURVEYOR

P.O. BOX 5547, NAIROBI.

Report on extra works by Mr.C.W.Newlyn.

	maner i marini	Description	Unit	Quan- tity	Rate	Shs.	Cts.
	Sorger to adult and or	OPAFA ESTATE. DOONHOLE ROAD WAIROBI	is, diagnosialinis superi ur um Proteo Superi superi	a contraction of the contraction	illetting same in transfer makeling op transferender i die stelle i die	and the American September 2000 and the Company of September 2000 and the	TEST MEMBERS AND THE SECOND
10		Extra works carried out by - Messrs. ATA UL HAQ. Contractors.					
	1	Provide and fix galvanized sheet iron flashings to Two Flue chimney stacks. as per Variation Order No. 3739 of 5th January, 1955	No.	129	142/-	18,318.	00
	2	Ditto to single flue stacks on three sides only.	No.	20	75/-	1,500.	00
	3	Ditto on four sides	No.	20	120/-	2,400.	00
20	<u> </u>	6" Precast concrete drain channel amount as measured. 2137'0" allowed in Contract 1200'0"	L.F.	937	5/-	4,685.	00
	5	4" x 2" Head plate to Lavatory Blocks as per Mr. Goodwins memo to the Architects dated 9/6/55	L.F.	733	1/50	1,099.	50
	6	Cement and sand render to exposed edge of concrete floor slab see Mr. Good-wins memo to Architects 9/6/55	L.F.	14,490	-/40	5 <b>,</b> 796.	00
	7	lar x 1" Podo batten to eaves as per Contractors letter to the City Engineer 16/2/1955	L.F.	13,625	<b>-/</b> 20	2 <b>,</b> 725.	00
30	8	Form steps in roofs see various letters between Contractors and City Engineer. 9/10/54, 13/10/54, 20/10/54, 9/12/54, 14/1/55 and 18/3/56	No.	4.	338/-	1,352.	00
	9	Extra for removing boundary walls to Blocks Nos. 26 and 27 erected in the wrong position to the instructions of Mr. Stone. These walls reerected in right position as chit issued by Mr. Stone. No variation Order issued as should have been					
		under the circumstances	Item			415.	00

telle omeration		TT-2 de	Quan-	T) - + -	Cla	7 da	Exhibits 64.
	Description	Unit	tity	Rate	Shs.	UUS.	Report on extra
n pakenina ila sv	OFAFA ESTATE. DOONHOLT ROAD. MAIROBI Extra works carried out by -	g de sallegar gal — var , - value e salle surfer , a	aireadh Tean 9 - An t-Amharáth — 1910 teathir patr i	(Anthropological Anthropological Anthropological Anthropological Anthropological Anthropological Anthropologica	aller freiher zwei zu spein diele Le der Lauenszeller. 2006	-makes, sources for tags d.	works by Mr.C.W.Newlyn
10	Messrs.ATA UL HAQ. Contractors (Contd.)  Provide and lay Murram path to Block No.29 at express wish of Mr.Tanner and Mr.Stone. This was laid as the block had been handed to Friend Mission for occupation, and murram was laid for their benefit. See Mr.Goodwin's memo						- continued.
11	of 9/6/55 to Architects	Item			366.	00	
	dated 29/6/55	Item			800.	00	
12	Alterations to Children's Lavatories see variation order No.3741 of 12/3/55	No.	3	40/-	120.	00	
13	Provide and fix extra shelf in each Kitchen, as authorised and approved by Architects and Clerk of Works but never confirmed by a written variation order or chit	No.	456	6/-	2,736.	00	
14	Repairs to wall damaged by somebody else's lorry, see letter to the City Engineer re this dated 7/4/55 and	T-1		,	,		
	29/6/55	Item			270.	UU	
	TOTAL EXCLUDING CLAIM FOR EXTRA DEPTH OF FOUNDATIONS			Shs.	42,582.	50	

# NOTE:-

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It has not been possible to check Contractors claims for the increased depths of foundations as their record for this, a Site Plan Tracing agreeing depths and signed by Mr. Goodwin has been retained by the Court as vital evidence.

Prepared by:-

C.W. NEWLYN, A.R.I.C.S., Chartered Quantity Surveyor, P.O. Box 5547, NAIROBI.

The state of the s

Mile waterwood, w	Description	Unit	Quan- tity	Rate	Shs. Cts.	Exhibits 64. Report on extra
	OFAFA ESTATE. DOONHOLM ROAD, MAIROBI EXTRA WORKS, for which so far Contractors - Messrs. ATA UL HAQ, have made no claim but for which they are entitled to EXTRA PAYMENT.	тий пой точено и дентинення на точено на под	(Make, and Andreas And	ami kana kura jimba kushangan kana	in and a specific color specific color specific color color and a specific color col	works by Mr.C.W.Newlyn - continued
1	Extra labour and material in turning end units of Blocks Nos. 38A and 39 at right angles to main blocks this causing valley gutters to be inserted in roofs, and entailing extra labour and material to walling etc.					
	LUMP SUM VALUATION AS MEASURED AND VALUED AT USUAL RATES	Item			1,766. 90	
2	Extra Boundary Walling owing to step out from buildings in lieu of lining up	L.F.	55	35/	1,925. 00	
3	6" x 9" Lintels over doorways in lieu of 5" x 6" Specified. This done so that lintels would line up with walling courses as usual in good class work.  Difference in cost between Concrete in Lintels and 6" Stone walling as measured and valued.				<b></b>	
		5,130.00				
	2280 F.S. Formwork @ 1/50 =	3,420.00 8,550.00				
	Deduct 1140 F.S. 6" Stone walling @ 1/70 =	1,938.00			6,612.00	
	TOTAL EXTRA NOT SO FAR CLAIMED BY THE CONTRACTOR			Shs.	10,303.90	
	Prepared by:	Charter	NEWLYN, ed Quan O. Box NAIROB	tity Su 5547,		

#### EXHIBIT 65

## LETTER, CHIEF MATERIALS ENGINEER TO ATA UL HAQ

Public Works Department, Head Office, Nairobi.

18th January, 1956.

M.145/35/J/10.

MATERIALS BRANCH

Mr. Ata-Ul-Hag, P.O. Box 2809, MAIROBI.

Dear Sir,

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ANALYSIS OF SAMPLE OF SET MORTAR SUBMITTED BY YOU ON 16th JANUARY 1956 LAB REF: NO. C/8257

The following are test results carried out on sample of set mortar submitted by you in the presence of Mr. K.F. Craig-McFeely, K. Aljriwth.

Ratio. Cement to Sand = 1 to 4.2 parts by weight.

The above result was calculated from the calcium contents of the mixture, assuming 62% calcium (as CaO) in the cement used, and no calcium in the sand used.

The account for this work is also enclosed.

Yours faithfully,

??? Sgd. K.ALJRIWTH

f. CHIEF MATERIALS ENGINEER DIRECTOR FOR PUBLIC WORKS.

# EXHIBIT 66

LETTER. CHIEF MATERIALS ENGINEER TO ATA UL HAQ

MATERIALS BRANCH

Ata-ul-Haq, Esq., P.O. Box 2809, NAIROBI.

10th June, 1957

Dear Sir.

# MORTAR AND CONCRETE TESTS - OFAFA ESTATE

Below are copied the requested extracts from test results carried out for the Nairobi City Council on samples of set mortar and concrete said to have been taken from Section "B" of the above estate. Exhibits

65.

Letter. Chief Materials Engineer to Ata Ul Haq.

18th January, 1956.

66.

Letter. Chief Materials Engineer to Ata Ul Haq. 10th June 1957.

66.

Letter, Chief Materials Engineer to Ata Ul Haq.

10th June 1957 - continued.

Concrete Samples received in Materials Laboratory on 15th June 1955 and reported to City Engineer on 12th July, 1955.

Sample No.	Description	Ratio ( Cement	a. At Charles and a share	weight) Aggre- gate
C/7656	Contract '73B' Block 38 Floor	1	3.0	5.4
C/7657	Contract '73B' Block 30 Floor	1	3.6	6.2

Mortar Samples received in Materials Laboratory on 1st July, 1955 and reported to City Engineer on 21st July 1955.

Sample No.	Description	Ratio ( Cement	pts.by weight) Sand
G/7743	Block 38. 38/1	1	9.7
C/7747	38.B 189	1	8.3
C/7748	38/23/B Room 5th	1	4.4
C/7749	38/4/2/B	1	4.8

I must stress that we do not know anything more about the sample than the facts given in the description and that the sample containers of Samples C/7743, C/7747, C/7748 and C/7749 were signed by Mr. Goodwin of the City Council.

Although you say they are from your part of the work we have no knowledge of whether or not this is correct.

Yours faithfully,
F.S. Strongman.
CHIEF MATERIALS ENGINEER
for SECRETARY FOR WORKS.

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1.0

FSS/TNGM.
Copy to:Kaplan & Stratton,
P.O. Box 111,
NAIROBI.

#### EXHIBIT 67

# LETTER, ARCHITECT, AFRICAN HOUSING TO WATER ENGINEER

5th July, 1955

Water Engineer, City Council of Nairobi, NAIROBI.

Dear Sir.

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Re: OFAFA ESTATE, PART B, STAGE 7, CONTRACT 73 ATA UL HAQ.

Would you please supply and fix the remaining water taps to Block 28 Ablution Units. There are two more taps to be fixed to each of the three units.

I should also be grateful if you would make the water connections to Blocks 37, 38, 38A and 39 as soon as possible. These blocks are ready for occupation. I wrote to you requesting this work to be done on 10th June last.

Yours faithfully, Sd. Ronald F.Mould ARCH.I/C AFRICAN HOUSING

EXHIBIT 68

REPORT BY ARCHITECT, AFRICAN HOUSING

SITE REPORT BY A.H.A.

24th June, 1955

ATA UL HAQ CONTRACT 73 OFAFA ESTATE PART B, STAGE 1.

Work nearing completion. Blocks 37, 38 almost ready to take over.

Work appears to be generally reasonable. Mortar in joints and floor concrete suspect and tests to be made by P.W.D.

Whitewash and colour wash not of high standard Bag wiping poor, far too many holes left in walls to harbour bugs.

Sgd. RONALD F. MOULD.

Exhibits

67.

Letter, Architect, African Housing to Water Engineer.

5th July, 1955.

68.

Report by

Architect,

African Housing

24th June, 1955.

770.

#### Exhibits

69.

# EXHIBIT 69

# REPORT BY CLERK OF WORKS

Report by Clerk of Works. MEMO FROM W.H.M. GOODWIN C/WKS.

TO: THE ARCHITECT AFRICAN HOUSING.

Further to Mr. Stone's records of wall depths:-

Ata ul Haq went right up in the air when he 1. saw there were some of his buildings marked 3 courses only; and insisted on a check by excavation.

There was only time to do one, so we checked Block 30; and sure enough that was four courses deep, not three. He wants to do the next tomorrow.

2. I have compared Contract 60 with my record of holes, which fortunately, gives courses of depth in each hole. Again there are differences.

> W.H.M. GOODWIN, C/WKS.

The above has been noted and dealt with RONALD F. MOULD.

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70. Report to City Treasurer.

# EXHIBIT 70 REPORT TO CITY TREASURER

# REPORT TO CITY TREASURER.

FROM ARCHITECT I/C AFRICAN HOUSING: attaching Monthly Report No.13 and setting out calculations for Payment Certificate No.13 in the amount Sh. 96,813/-.

71. Report by Architect, African Housing.

# EXHIBIT 71

# REPORT BY ARCHITECT, AFRICAN HOUSING

30th September, 1955

OFAFA ESTATE STAGE 1, PART B, CONTRACT NO.73 ATA ÚL HAQ

REPORT: Estimate of cost for replacing floors that

are expected to produce serious defects due to subsidence of the hardcore backfilling, substandard concrete and screed.

Break up screed and floor and consolidate to existing hardcore by ramming.

Well wet hardcore and lay concrete floors 1:3:6 mix to a thickness of 4" and trowel finish to a smooth surface.

Keep well wetted and free from traffic for 72 hours.

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Allow for initial strength to be reached in 7 days 1,100 lbs. per square inch.

Estimated: £30 per unit. There are 252 units but basing this on 50% to be repaired,

Total £3,780.

RONALD F. MOULD. A/AHA.

#### Exhibits

71.

Report by Architect, African Housing

- continued.

# EXHIBIT 72

# REPORT BY ARCHITECT, AFRICAN HOUSING Date 19th July 1956

Memo from A/AHA to City Engineer

Re: Pending Court Cases - Ofafa Estate

(i) Part B Contract No. 73 -- Ata Ul Haq.

(ii) Part C Contract No. 75 - Colonial Con. Co.

I have several times expressed my views on the pending Court cases. I am now our only witness with any detailed knowledge of these Contracts and there is a lot more I would like to know about the Contracts.

The information can only be obtained from people who supervised the work prior to me - namely:-

Mr. Bridger, ex C.E.

Mr. Saunders, ex D.C.E.

Mr. Tanner, ex. A.H.A.

Mr. Stone, ex C/Wks.

Mr. Goodwin has submitted a report which is biased and incorrect. In his report he refers to an inspection which took place on the morning of the 23rd June, 1955. The facts relating to this inspection are as follows:

72.

Report by Architect, African Housing.

19th July, 1956.

#### 772.

### Exhibits

72.

Report by Architect, African Housing.

19th July, 1956 - continued. On Monday the 20th June '55 I made a quiet inspection of Blocks 38, 38A, 38B and 39 and found the floors to be particularly bad. I instructed Mr. Goodwin to check all the rooms, paying particular attention to the floors which must be repaired where defective. Before leaving the site, I informed Mr. Goodwin that I would be down later in the week with Mr. Ross-Whyte to inspect these blocks in detail. I was very busy at the time in the office having only Mr. Thomas as an assistant.

On Thursday the 23rd June '55, Mr. Ross-Whyte and I visited the site and were given to understand by Mr. Goodwin that the work was ready for inspection.

We found the blocks, in giving them a detailed inspection - to be full of defects - in particular the floors - which had not been attended to.

Mr. Goodwin was reprimanded by me. I was further annoyed with him for having passed a letter to the Contractor stating that he had inspected and approved these blocks as satisfactory for taking over.

I refer to the memo typed by Mr. Goodwin on my instructions authorising the contractor to attend to the defects.

You will note that I had asked for all screeds to be taken up where defective so that I could examine the concrete floor. The work was not left open and Mr. Goodwin had not the common sense to ensure that they remained open for me to inspect or get them reopened. I had to personally order the contractor to open up the work again as in the case of the trial holes which came later. This is typical of many instances.

Mr. Goodwin's report is written having knowledge of recently revealed defects and not what was known at the time. He refers to Mr. Ata Ul Haq being intensely angry at these times - of course he was - he knew that if these inspections of his past work persisted, we were bound to find his major defects.

I hope you will appreciate the position I am in. I gave evidence at the Public Enquiry for mine days. It was very exhausting - not to mention the fantastic amount of work I did preparing for it. I am not looking forward to the pending court cases, being the principal witness whilst the more vital witnesses are absent, or to have a person like Mr. Goodwin to act as an associate witness.

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I have been connected with the Ofafa Estate Contracts for a long while now - and I was responsible for condemning most of the work - naturally I am as concerned about the ultimate results as anybody but I am not prepared to stand and fight this out for the Council almost single-handed or to be brought into conflict with Council's staff.

Finally, I feel it wrong that I should be expected to put files etc. into order for the advocates and liaise with other witnesses to produce their evidence particularly when some are unwilling to co-operate, or in the case of Mr. Goodwin, he submits a biased report.

I consider I have more than enough work to do running a section and trying to produce work in a few months which should have been completed over the past three years.

Ronald F. Mould.

#### Exhibits

72.

Report by Architect. African Housing.

19th July, 1956 - continued.

## APPENDIX TO EXHIBIT 72

C/W's Report on Contract No.73, Part B. Ofafa by Ata Ul Hag - 1955

On the 2nd June 1955 I was instructed by the architects Messrs. Tanner & Mould to take over this Contract at once as Mr. Stone, the Clerk of Works, was absent.

I was introduced to Mr. Ata Ul Hag. Stone opposed all records of measurements, all I had was Contract documents and drawings and the Reports file.

Blocks 25, 26, 27, 28, 29, 31, 32, 33, 34, 35 and 36 were completed and handed over before I arrived.

Blocks 38A, 38B and 39 were completed, decorated but not yet finally handed over and Block 30 completed and decoration in hand. Block 38 was completed except for finishing off verges and the decoration and final minor repair items.

Block 37 was having roof ridge finishing and floors not yet all screeded and doors to hang and finishing off the ironmongery.

I found the work generally far better than on Contract 60 which I was also supervising but still many items not up to specification.

For about three weeks I carried on making inspections of blocks, particularly the floors, doors,

Appendix to Exhibit 72.

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#### 774.

## Exhibits

72.

Report by Architect, African Housing. 19th July, 1956.

Appendix to Exhibit 72 - continued. tiled roofs and lime washing under the direct control of Mr.R.F. Mould, Mr. Tanner having little to do with me as I only saw him a few times before he finally left Kenya.

On the 23rd June, Messrs. Mould and Ross-Whyte came to inspect the Blocks 30, 38A, 38B and 39 but their inspection was so rigid that they declined to pass any of these blocks and I was reprimanded for not having them up to required standard.

I then pointed out that it was now too late to get these blocks right up to specification or even near to it short of extensive alterations and replacements and that an architect could come round and seek a fresh list of defects every time make a fool of any Clerk of Works at this stage.

On this occasion it was floors, lime washing, chimney caps, roof tiles and doors hanging closing or hanging open which were condemned as being unsatisfactory and to be corrected or made good.

The contractor was complaining of all sorts of unpaid extras and as I did not have the previous Clerk of Works' records of measurements, I was unable to find out exactly where this contract stood.

I have made detailed inspections and prepared lists of repairs and Mr. Mould produced copies of the variations officially ordered and he checked through my lists of contractors claims and work done.

On 25th June I started to check Mr. Stone's records of foundation wall depths and the contractor at once disputed these and claimed he could dig and prove that extra depth of foundations exceeded what Mr. Stone had recorded. Later he dug and proved same to be wrong.

On 27th June I found floors in Block 39 had been repaired in direct contradiction of written instructions of 23rd June, to keep opened up floors for inspection.

On 28th June Mr. Mould came to inspect and contractor then got excited and very angry claiming this was all unfair etc. I spent the afternoon at Town Hall with Mr. Mould checking the points generally.

On 29th June I obtained further details of this Contract from Mr. Mould with approved variations which could now be measured by me.

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During the first week of July, I measured some work and checked maintenance repairs and attempted to clear up the variations in the foundation wall depths, contractor digging some holes to prove the actual depth, but by this time he was becoming intensely angry and peeved and tackled repairs to Block 37 and decoration work to Block 38 but was very stubborn about the repairs to Block 39 - floors.

On 13th July I started inspecting trial holes to obtain correct depths of foundations and pressed contractor to get on with floors.

On 15th July after further general inspections of blocks, I went to Town Hall to report on the general position to Mr. Mould, then I spent the next few days trying to keep the contractor going.

On 19th July with Mr. Mould we took samples of mortar and I took six samples to P.W.D. for testing.

On 20th July I completed my trial holes, checked and prepared a plan for Mr.Mould but when he came later to check, the trial holes had been filled in by contractor who was now in a difficult mood.

On 21st July contractor opened up holes again on instructions and then until about the 4th August I continued checking and recording for both contracts.

On 5th August Mr. Mould brought a team to start a complete check, block by block of the whole contract and Mr. Ata Ul Haq blew up and then started to remove his plant and leave the work unfinished.

For the remainder of August I spent part time checking on site and part time in architects office, Town Hall, preparing reports etc.

During September '55 I was employed mainly in Town Hall office except for the 26th and 28th when I carried out further checks of Blocks 25 to 39 to complete detailed records.

On November 28th I again started using day labour employees under Mr. Ross-Whyte (B.W.Department), Mr. Mould also visiting the work and making inspections and carried on until 17th February '56 when work was stopped after a visit by the City Engineer and I then left Ofafa.

Exhibits

72.

Report by Architect, African Housing.

19th July, 1956.

Appendix to Exhibit 72 - continued.

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72.

Report by Architect, African Housing.

19th July, 1956.

Appendix to Exhibit 72 - continued.

NOTES:

- (1) Under an architect who had inherited this thankless job and without the usual handing over and opinion of measured work from outgoing Clerk of Works, I found this a particularly exacting position and there was annoyance and exasperation on all sides.
- (2) My main complaint was that it was impossible to produce work up to the very high standard required by Mr. Mould at this late stage, short of replacing and making good wholesale all work that was already mainly finished before I took over and the contractor was not prepared to carry out this extensive programme.

W.H.M. Goodwin, C/Wks.

73.

Letter, Chief Materials Engineer to Ata Ul Haq. 11th July, 1957.

## EXHIBIT 73

# LETTER, CHIEF MATERIALS ENGINEER TO ATA UL HAQ

MINISTRY OF WORKS 11th July, 1957

## MATERIALS BRANCH

Mr. Ata-Ul-Haq, P.O. Box 2809, MAIROBI.

# ANALYSES OF SAMPLES OF SET CONCRETE AND MORTAR FROM OFATA ESTATE.

On 6th July, 1957, 2 samples of set concrete and 4 samples of set mortar were handed over personally by you to Mr. Adamson of the Materials Branch, Ministry of Works, in the presence of Mr. Craig-McFeely.

Two other sealed samples which were handed over at the same time were later handed back to you at your request with the seals still intact as you allege that you were not present when those two samples were taken.

The description given on the bag containing each sample was as follows: (Our corresponding Laboratory reference number is also given).

#### Our Ref.No.

#### Description

C/9852 Cement mortar removed from foundation walling on exterior face, Ofafa Estate Part B 5/7/57, 1 course below floor slab, Room 184, Block 38A; witnessed by Messrs. Craig-McFeely and Stone.

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	Our Ref	Descrip	otion	Exhibits 73.					
	C/9853	ling on exterior face B 5/7/57, l course be		Letter, Chief Materials Engineer to Ata Ul Haq.					
10	C/9854	Cement mortar removed walling on exterior f floor slab, Room No.4	fafa Estate Part B.5/7/57.  ement mortar removed from foundation alling on exterior face, 1 course below loor slab, Room No.45, Block 37; wit- essed by Messrs.Craig-McFeely and Stone.						
	0/9855	ling on exterior face	25 Block 31; witnessed ely and Stone.						
20	C/9857	Concrete floor slab r room, Ofafa Part B, 5 No.33, Block 38; with McFeely and Arshad-Ul	th July, 1957, Room essed by Messrs.Craig-						
	C/9858	Foundation Concrete r face, Ofafa Part B, 5 Block 29: witnessed by Craig-McFeely.							
	Analyses descript	: The results, togeth							
30	Lab. Ref. No.	Description	Ratio Ce- Ratio Ce- ment to ment to total Ag- sand to gregates stones. pts. by pts. by weight. weight.						
	C/9852	A number of pieces of mortar; hard to break down; total weight of sample 192 gm.	l to 5.2 Aggre- gates all						
40	C/9853	A number of pieces of mortar; hard to break down; total weight of sample 339 gm.							
	C/9854	A number of pieces of mortar with much dust some pieces hard to break down; other pieces moderately easy to break down, total weight of sample 213 gm.	,						

Exhibits 73. Letter, Chief Materials Engineer to Ata Ul Haq. 11th July, 1957 - continued.	Lab. Ref. Nc.	Description	ment to total Ag- gregates pts. by		
	C/9855	A number of thin flat pieces with some black cotton soil adhering at places. Sample consists of two layers - one grey and the other brown in colour - The grey layer makes up most of the sample. The grey layer is hard to break; the brown layer is easy to break total weight of sample 361 gm.	· •	Aggre- gates all sand.	10
	C/9857	l large and l very smal piece of grey coloured concrete - weight 129 gm., and l medium size piece of concrete with brown coloured matrix weight 300 gm. The gre concrete is hard to break, but the brown concrete is moderately easy to break.	d - y	1 to 3.9 to 3.5	30
	C/9858	l large piece of concrete, weight 2,448 gm some black cotton soil adhering, slightly honeycombed at one par but the rest of the sample is dense and hard to break.	1. 9	1 to 3.1 to 6.2	
	,	CHIEF MAT	ork is end F.S. Strong PERIALS ENG RETARY FOR	man Hiveer	40

RBA/INGM.

#### EXHIBIT "A"

## REPORT BY CHIEF MATERIALS ENGINEER

# ANALYSES OF SAMPLES OF SET CONCRETE AND MORTAR FROM OFAFA ESTATE

# LAB. REF. NO'S. C/8822 - C/8861 (INCLUSIVE)

On 22nd June, 1956, 20 samples of set concrete and/or mortar were received personally from Mr. Wevill by the undersigned (Mr.R.B.Adamson). On 27th June, 1956, a further 20 samples were also received in like manner. The samples were examined and analysed for cement content and aggregate proportions as reported hereunder. In cases where both mortar screed and concrete were included in the same sample and could be readily distinguished, separate analyses were made of concrete and mortar.

#### Location of Sample.

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The description of the location of the samples and the sample numbers, both items as stated by Mr. Wevill are given below. In our report on the examination of the samples we are using your sample numbers to identify the appropriate location of the samples, with the slight modification that where a sample has been divided into concrete and mortar screed, the number has the affix 'A' to denote the concrete, and 'B' to denote the mortar screed.

	Sample No.			Sam	ples f Part			ting		
.20	1.	Concrete Concrete						k 25	•	14
·30	3. 4. 5. 6. 7. 8.	Concrete  ""  ""  Concrete	11 11 11		Blo Blo Blo Blo	ck ck ck ck	26. 29. 28. 30.	Room Room Room	No.44 No.38 No.38 No.38	29 36 37
	9.	£1	1t	tt	11		Bloc	k 35	No.31 No.31	
40	10. 11. 12. 13. 14.	Concrete "" "" "" Mortar f:	11 12 11		Block Block Block	34 33 37 37	Rock Rock Rock	om No. om No. om No. om No. om No. om No.	.337. .111. .110. .64.	
	16.	Mortar la	ayer on	roc	k outc	rop	und	ler_wa	-	

Block 38 Room No. 9.

#### Exhibits

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Report by Chief Materials Engineer.

Exhibits	Sample No.	Samples for Testing Part 'B'	
Report by Chief Materials	17. 18. 19.	Concrete Foundation Block 38A Room No.184.  "Block 38B Room No.185. "Block 39 Room No.197.	
Engineer continued.	40.	Concrete Floor and Floating Block 37, Room No. 87.	
		Samples for Testing Part 'C'	
	20. 21. 22.	Concrete Foundation Block No.50 Room No.1180 "Block No.52 Room No.1180 Concrete Floor and floating Block 52 Room	10
	23.	No.1212 " Block 49 Room No.1142	
	24. 25. 26. 27. 28.	Concrete Foundation Block No.49 Room No.1141  " " Block No.48B Room No.1112  " Block No.48D Room No.1138  " Block No.48A Room No.1096  " Block No.47 Room No.1074	
	29. 30. 31.	Block No.47 Room No.1061 Block No.45 Room No.1038 Concrete Floor and Floating, Block No.45 Room No.1033	20
	32. 33. 34.	Concrete Foundation Block No.44 Room No.1021  Block No.46 Room No. 36  Block No.42 Room No. 976  (too weak for fair sample)	
	35.	Concrete Floor and Floating Block No.42 Room No. 968	
	36. 37. 38. 39.	Concrete Foundation Block No.42 Room No. 956  "Block No.41 Room No. 923  Block No.40 Room No. 918  Block No.40 Room No.897	30
		ance etc., of Samples	
	D alysis and br	uring the preparation of the samples for an, notes were taken of the appearance, size, eakage susceptibility etc., of each sample. are stated as follows:-	
	Sample No.	Appearance etc., of Sample	
	1.	l Large lump of concrete, weight 3,800 gm. wet, very easily broken down.	40
	2A	l Elongated piece of concrete with some soft stones sticking to one side. Weight of piece 2,400 gm. The soft stones appeared to be pieces of murram. Concrete moderately diffi- cult to break down.	

Sample No. Appearance etc., of Sample 2B Thickness of mortar screed about 3 to 1". A few large stones sticking to underside of screed. Mortar moderately difficult to break down. 3. 2 Pieces of concrete, total weight 1,500 gm. Black Cotton Soil adhering to the pieces; concrete moderately easily broken down. 2 Pieces of wet concrete total weight 1.300 4. 10 gm. 5. 1 Large piece of concrete; weight 2,100 gm; with some black cotton soil adhering to it; also some stones in relief; concrete moderately difficult to break down. 6. 1 Elongated piece of concrete; weight 1,400 gm; some black cotton soil adhering; concrete moderately difficult to break down. l piece of concrete slightly greenish in colour on one side; weight 1,200 gm; some 7. 20 black soil adhering; also a few stones in relief; moderately difficult to break down. **A8** A number of small pieces of concrete; total weight 1,300 gm; much black cotton soil adhering to sample; concrete moderately easily broken down. 813 Mortar screed with some stones adhering to underside weight of sample 700 gm; screed moderately difficult to break down. 9. 1 Large piece of concrete, weight 4,000 gm. Concrete very easily broken down. (NOTE:- There was no mortar screed includ-30 ed in this sample) 10. 1 Piece of concrete, weight 1,000 gm. some black cotton soil adhering; moderately easily broken down. 11. 2 Pieces of wet concrete, total weight 1,800 gm; some stones in relief; concrete moderately easily broken down. 12. 3 Small pieces of wet material, total weight 40 407 gm; some black cotton soil adhering. (NOTE: - The material was said to be concrete but there were no stones in the sample, the aggregate being sand only).

Exhibits

Report by Chief Materials Engineer.

- continued.

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Exhibits	Sample No.	Appearance etc., of Sample	
"A" Report by Chief Materials Engineer.	13.	l Large piece; wet; weight 3,600 gm; black cotton soil adhering to one side; some stones in relief; moderately easily broken down.	
- continued.	14.	2 Pieces of concrete, slightly wet, total weight 1,400 gm. Very easily broken down.	
	15.	Small sample of mortar; weight 355 gm; in a number of pieces and in powder form. Extremely easy to break down.	10
	16.	l Piece said to be mortar, but contains a few stones; weight 224 gms;	
	17.	A number of small pieces of slightly wet grossly oversanded concrete; total weight 700 gm. Very easily broken down.	
	18.	l Large piece of concrete, weight 3,500 gm, some black cotton soil adhering to one side; many stones in relief; extremely easily broken down.	Ĩ.
	19.	A number of small pieces, total weight 700 gm; some black cotton soil adhering; some pieces contain only fine aggregate, others contain both large and fine aggregate. Sample fairly easily broken down.	20
	40.	l large and one small piece of concrete; total weight 1,900 gm; sample moderately hard to break down. (NOTE:- The sample was said to consist of concrete floor and floating. As there appeared to be no line of demarcation between floating and concrete, it was decided to treat the sample as one unit (i.e., no attempt was made to separate floating from concrete).	30
	20.	A number of small pieces of concrete; total weight 1,300 gm; some black cotton soil adhering; moderately easily broken down.	
	21.	l Large piece of concrete; weight 2,600 gm. Some very large stones in slight relief at one side; concrete moderately difficult to break down.	40
	22A	l large piece of concrete, weight 3,300; some stones slightly in relief at one side; concrete moderately difficult to break down.	
	22B	2 Pieces of mortar; total weight 500 gm; moderately difficult to break down.	er.

Sample No. Appearance etc., of Sample 1 Large piece of concrete; weight 1,600 gm; 23A with a little murram like material sticking to one side; moderately difficult to break 23B A number of small pieces of mortar; total weight 470 gm; moderately easily broken 10 24. 1 Fairly large piece and a few small pieces; total weight 800 gm. Aggregate appears to be mainly sand with a few larger pieces of gravel, sample very easily broken down. 25. A number of small pieces of concrete in two bags; total weight 1,100 gm; some black cotton soil adhering to pieces; concrete appears to be grossly oversanded and is moderately easily broken down. 26. 2 Pieces of concrete; total weight 1,500 gm; 20 very small amount of black cotton soil sticking to the pieces; concrete is moderately difficult to break down. 27. 1 Piece of concrete; weight 900 gm; black cotton soil adhering; a few stones in relief; concrete appears oversanded, but is moderately difficult to break down. 28. A number of pieces of concrete in two bags; total weight 1,300 gm; some black cotton soil adhering; some stones in relief; mod-30 erately difficult to break down. 29. 1 Elongated piece; weight 600 gm; one side appears honeycombed, has a greenish colour at places and has a smell like that of damp vegetation; one very large stone present; concrete moderately difficult to break down. 30. 1 Elongated piece and a number of pieces of concrete in two bags; total weight 1,200 gm; some black cotton soil adhering; green colour at one place; the greenish area has a smell like that of damp vegetation; 40 concrete moderately difficult to break down. 31A 1 Large piece of concrete; weight 1,800 gms; some stones in relief; concrete moderately difficult to break down. 2 Fieces of mortar screed; thickness  $\frac{1}{2}$ <sup>u</sup> to  $\frac{3}{4}$ <sup>u</sup>; with some stones adhering to underside; 31B total weight 600 gm; mortar moderately easy

to break down.

Exhibits

Report by Chief Materials Engineer

- continued.

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Exhibits	Sample No.	Appearance etc., of Sample	
Report by Chief Materials	32.	4 Small pieces of concrete; total weight 600 gm; moderately easy to break.	
Engineer - continued.	33.	2 Pieces of concrete; total weight 1,300 gm; many large stones partly in relief; some black cotton soil adhering; concrete moderately easy to break down (aggregates appear to consist of large stones and sand i.e., virtually no small stones are present)	
	34.	A few small pieces of concrete; total weight 240 gm; sample was dry at time of examination but had apparently been wet when it had been put in the paper bag, as the latter showed signs of having dried out; obviously grossly oversanded; only a few large stones and sand comprised the aggregate (i.e., no small stones present) some black cotton soil adhering, concrete easy to break down.	10
	35A	A large piece of concrete; weight 2,800 gm; with some mortar screed adhering on one face (top); surface very rough on bottom face; concrete moderately difficult to break.	20
	35B	A few small pieces of mortar screed; total weight 280 gm; some stones adhering to underside; thickness of screed $\frac{50}{8}$ to $\frac{30}{8}$ mortar moderately easy to break.	
	36.	l Large lump of concrete with some smaller pieces; total weight 1,700 gm; much black cotton soil adhering to one side; moderately difficult to break.	30
	37。	A few pieces of concrete; totalweight 1,700 gm; much black cotton soil adhering at places; concrete moderately difficult to break.	
	38.	A few pieces of concrete with very much black cotton soil adhering; total weight 1,400 gm; obviously grossly oversanded; some green spots evident which smell of damp vegetation; some grass inside samples; concrete very easy to break; virtual absence of small stones in aggregate (only large stones and sand present).	40
	39.	l Piece of concrete; weight 1,600 gm; some black cotton soil adhering; concrete modererately difficult to break.	

NOTE: Breakage susceptibility:- The ease or otherwise of breaking up pieces of concrete with a hammer was very roughly assessed by considering that properly made 1:3:6 concrete is 'difficult' to break down while properly made 1:5:10 concrete is 'moderately difficult' to break down. On the same scale we would consider properly made 1:8:16 concrete 'moderately easy' to break down, and any mix weaker than this would be considered 'easy' or 'very easy' to break down.

# Exhibits

"A"

Report by Chief Materials Engineer.

- continued.

## Notes on Preparation of Samples for Analysis.

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In all cases where black cotton soil or murram were adhering to the samples, these were removed as far as possible before analysis. In the cases where stones were adhering to the undersides of samples of mortar screeds, the stones were removed before analysis. (In the case of mortar sample number 16, the stones were not removed before analysis as they appeared to be an integral part of the sample).

Analysis were made on the samples after they had been ignited in a muffle furnace at 900°C. The cement contents were calculated from the calcium contents of the mixtures assuming no calcium in the sand and aggregates used and 62% calcium (as CaO) in the cement used. A rough distinction was made between 'sand' and 'stones' by sieving the acid separated aggregates through a B.S. No.14 Sieve, the undersize being considered 'sand' and the oversize being considered 'stones'. It is recognised that a proportion of the sand will almost invariably be retained on a B.S.No.14 Sieve, but we consider that the apparent underestimation of sand proportion through this cause is more or less counterbalanced by the limited, but nevertheless inevitable breakage of the stones during sampling and preparation of the sample.

# Cement Contents of Samples

40	Sample No.	Ratio: Cement to Total Aggregates (pts. by weight)	Ratio: Cement to Sand to Stones (approx.) (pts. by weight)
	1. 2A. 2B. 3. 4. 5.	1 to 21.7 1 to 37.1 1 to 10.8	1 to 11.3 to 13.0 1 to 7.9 to 13.6 (Aggregates all sand.) 1 to 8.9 to 12.8 1 to 16.0 to 21.1 1 to 3.6 to 7.2
	6.	1 to 9.5	1 to 4.5 to 5.0

Sample No.  7. 8A. 8B. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 40.	Total Aggregates (pts. by weight)  1 to 12.4 1 to 14.0 1 to 27.1 1 to 25.5 1 to 19.2 1 to 6.5 1 to 29.9 1 to 35.7 1 to 15.8 1 to 21.4 1 to 33.9 1 to 52.8 1 to 14.9 1 to 10.1	Ratio: Cement to Sand to Stones (approx.)    (pts. by weight)  1 to 4.9 to 7.5 1 to 6.1 to 7.9    (Aggregates all sand) 1 to 10.6 to 16.5 1 to 11.3 to 14.2 1 to 5.7 to 13.5    (Aggregates all sand) 1 to 12.8 to 17.1 1 to 15.5 to 20.2    (Aggregates all sand) 1 to 9.2 to 12.2 1 to 18.4 to 15.5 1 to 16.6 to 36.2 1 to 7.6 to 7.3 1 to 4.7 to 5.4	10
20. 21. 22A. 22B. 23A. 23B. 24.	1 to 21.7 1 to 11.9 1 to 16.7 1 to 5.2 1 to 15.6 1 to 7.9 1 to 9.8	l to 7.7 to 14.0 1 to 6.2 to 5.7 1 to 5.8 to 10.9 (Aggregates all sand) 1 to 5.8 to 9.8 (Aggregates all sand) (Aggregates all sand)	20
25. 26. 27. 28. 29. 30. 31a. 31B.	1 to 19.2 1 to 17.1 1 to 15.2 1 to 10.6 1 to 15.8 1 to 12.8 1 to 13.3 1 to 6.3 1 to 21.5	1 to 9.0 to 10.2 1 to 7.7 to 9.4 1 to 6.3 to 8.9 1 to 3.6 to 7.0 1 to 6.4 to 9.4 1 to 5.6 to 7.2 1 to 4.7 to 8.6 (Aggregates all sand) 1 to 9.3 to 12.2	30
33. 34. 35A. 35B. 36. 37. 38. 39.	1 to 21.4 1 to 14.4 1 to 5.8 1 to 16.7 1 to 18.3 1 to 15.4 1 to 10.6	1 to 7.4 to 16.9 1 to 13.6 to 7.8 1 to 5.5 to 8.9 (Aggregates all sand) 1 to 5.7 to 11.0 1 to 6.2 to 12.1 1 to 10.9 to 4.5 1 to 5.0 to 5.6	40
	7.8A.8B.9.10.12.13.14.15.16.17.18.19.40.222B.23A.22B.22B.23B.24.256.27.28.23B.24.256.33.33.33.33.33.33.33.33.33.33.33.33.33	No. (pts. by weight)  7.	Total Aggregates

RBA/MC. CHIEF MATERIALS ENGINEER for DIRECTOR OF PUBLIC WORKS.

#### EXHIBIT "B"

#### LETTER. ATA UL HAQ TO CITY ENGINEER

P.O. Box 2809, NAIROBI. 27th August, 1954

The City Engineer, Town Hall, NAIROBI

Dear Sir,

Re; Doonholm Neighbourhood, Stage 1, Part B, Contract N.73 - African Houses

I beg to inform you that as per instruction of your Clerk of Work Mr. Stone, I have done stone plinth for the future wall under the Concrete Slab of Ablution Blocks of the above African Houses.

Please issue me the variation order for the work, as it is an extra.

Thanking you.

Yours faithfully, ATA-UL-HAQ.

## EXHIBIT "B"

P.O. Box 2809,
NAIROBI.
The City Engineer, 27th August, 1954
Town Hall,
NAIROBI.

Dear Sir.

Re: Doonholm Neighbourhood, Stage 1, Part B, Contract No.73 - African Houses

I beg to state that as per instruction of your Clerk of Work Mr. Stone, I have fixed one extra Batten on top of the Fascia Boards of the above African Houses.

Please issue me the variation order for the above work as it is an extra.

Thanking you.

Yours faithfully, ATA-UL-HAQ.

#### Exhibits

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Letter, Ata Ul Haq to City Engineer. 27th August, 1954.

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Letter, Ata Ul Haq to City Engineer 27th August, 1954.

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EXHIBIT "B"

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1955.

# LETTER, CITY ENGINEER TO ATA UL HAQ

Letter, City Engineer to Ata Ul Haq. 24th March. Mr.Ata Ul Haq, P.O. Box 2809, NAIROBI.

Dear Sir.

24th March, 1955

## Doonholm Neighbourhood, Stage 1, Part B, Contract N.73

I refer to your two letters dated 17th March, 1955, Clause 5 of the Specification states quite clearly that 'the Contractor shall provide at his own risk and cost all water and lighting required for the works and shall pay all fees in connection therewith'. For the past two years Contractors have paid all fees and it is the intention that they will continue to do so.

It should not have been necessary to fix the batten for which you are claiming an extra. If the roof is set out as shown on drawing No.3183/AH/2/14 the 6" fascia board should line with the top of the window frames. Because of small inaccuracies in setting out the roof, it was found that in many cases the bottom of the fascia board was sometimes 2 - 3 inches higher than it should have been. To save the expense of resetting the roof you were permitted to lower the fascia board and to use the batten instead of the fascia as a tilting fillet.

Where the fascia lines correctly with the window head it is unnecessary to use a batten and no instructions have been given to you to do so.

I regret I cannot vary these decisions.

Yours faithfully.

CITY ENGINEER.

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## EXHIBIT "C"

# REPORT BY CHIEF MATERIALS ENGINEER

PUBLIC WORKS DEPARTMENT, HEAD OFFICE.

NAIROBI. 11th August, 1955.

# MATERIALS BRANCH

The City Engineer, City Council of Nairobi, P.O. Box 651, NAIROBI.

# Exhibits

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Report by Chief Materials Engineer

11th August, 1955.

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## SET MORTAR -- TEST NOS. C/7827-C/7832 & C/7875-C/7881

Attached hereto are the results of tests carried out on set mortar submitted by you under cover of your letter.

The account is also enclosed for the samples submitted by you up to and including 10th August, 1955. Our letters reference Nos. M.2806/35/K/34 of 12th July, 1955 and M.2894/35/P/18 of 21st July, 1955 refers.

Sd. ???

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/TNGM.

for CHIEF MATERIALS ENGINEER for DIRECTOR OF PUBLIC WORKS

# SET MORTAR FROM CITY COUNCIL I C/7827 TO C/7832

			RATIO			
	LAB.REF:	CITY COUNCIL REF:	CEMENT	SAND		
30	C/7827	Contract 73/B Block 31 end wall 140	1	16.1		
		Contract 73 Part B, Stage 1, Ex. Room 57 Block 37	1	11.3		
	•	Contract 73 Part B, Stage 1, Block 38A	1	23.8		
		Contract 73 Part B, Block 38A outside 180	].	18.2		
	·	Contract 73 73/B Block 38B Room 187	1	9.6		
	C/7832	Contract 73 Block 39 Room 223	1	9.5		
	II C/7875 TO C/7881 RATIO					
40	LAB .REF:	CITY COUNCIL REF:	CEMENT			
	C/7875	Contract 73 Part B, Ata ul Haq Block 30, Room 328	1	18		
	C/7876	Contract 73 Part B, Ata ul Haq Block 35 Room 304	1	16.2		

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Exhibits "C"  Report by Chief Materials Engineer  11th August, 1955 — continued.	LAB.REF: CITY COUNCIL REF: CEMENT SAND  C/7877 Contract 73, Part B, Block 35	10
u <sub>E</sub> a	EXHIBIT "E"	
Report by Architect, African Housing. 7th February,	REPORT BY ARCHITECT, AFRICAN HOUSING City Engineer, 7th February, 56 from A/AHA.	
1956.	OFAFA ESTATE - STAGE 1. PARTS A, B & C.  A Final decision must be made soon with regard to the Ofafa Contracts - Stage 1.	
	Apart from the rebuilding of blocks on Part 'A' the work is almost at a standstill.	20
	A study of the costs involved to put the buildings into a utility condition to last 40 years is alarming.	
	(1) Tender Sums  Part A £ 80,000  Part B £ 85,000  Part C £ 60,000  £ 225,000	
	(2) Estimated Cost to put these contracts into a reasonable utility Standard to last 40 years  Part A £ 71,240 Part B £ 62,000 Part C £ 47,300 £ 180,540	30
	(3) The Question now arises, what are the alternatives. As I see it we faced with the following -	
	(i) Is it worthwhile spending £180,540 just to have utility houses. (My answer is NO.)	40

(ii) Is it worthwhile demolishing these buildings and to rebuild as originally specified - bearing in mind that we should only salvage about £60,000 worth of material which could be re-used. (My answer is No.)

Exhibits uAtı

Report by Architect, African Housing.

7th February, 1956 - continued.

(iii) Is it worthwhile demolishing these buildings, and to dispose of the salvaged material either to the Council's Buildings Works, or to Private contractors - and to complete Ofafa with the houses the joint Gov/Council Scheme. (My answer is No - although it is preferable to (i) and (ii).)

Is it worthwhile leaving the buildings as they stand - and to expect them to last, at the most, 20 years with undoubtedly more than normal maintenance, and to sue the contractors for our losses. (My answer is Yes.)

Finally - if we leave the building - will it be worthwhile putting in W.C. at £70 per unit.

Rev: Tender Item Contracts Estimate Estimate Sum

# PART 'A' CONTRACT NO.60 CHANAN SINGH

Estimated Cost to complete by Direct Labour £21,000

Revised Estimate based on actual costs to date

£28,000

Estimate for taking up floors and back-

fill and to relay £17,000

Underpin foundations 130 ft. per unit @ 20/- ft. run -248 units

£32,240

5. Bolting tiles and rafters

£ 1,000

Estimated Total

£71,240

£80,000

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Exhibits "E"  Report by Architect, African Housing. 7th February, 1956 — continued.	Item	Contracts	Estimate	Rev: Estimate	Tender Sum				
		PART 'B' CONTRACT	NO.73 AT	A-UL-HAQ	न प्रकार पुरस्कृतिक संस्कृतिक ६० वर्ग स्टब्स्ट प्रकार स्टब्स्ट ह				
	1.	Estimated cost to complete by Direct Labour (approxi-							
	2.	mately only) Estimate for taking up floors and	£10,000		10				
	3.	backfill and to relay Underpin foundations 130 ft. per unit	£18,000			TO			
	4.	© 20/- ft. run - 252 units Bolting tiles and	£33,000						
		rafters	£ 1,000 £62,000		£85,000				
					THE THE PARTY OF T				
		PART 'C' GO COLONIAL COM				20			
	1.	Estimated cost to complete by Direct Labour (approximately only)	£ 8,000			<b></b> 0			
	2.	Estimate for taking up floors and backfill and to	·						
	3.	relay Underpin founda- tions 130 ft. per unit @ 20/- ft.	£13,500						
	4.	run - 179 units Bolting of tiles	£25,000						
		and rafters	£ 800						
			£47,300		£60,000				

WITH ALL THIS WORK IT ONLY PRODUCES UTILITY STANDARD BUILDINGS.

# EXHIBIT "P"

# REPORT BY ARCHITECT, AFRICAN HOUSING

City Engineer,

6th February, 56

Ofafa Estate, Stage 1, Parts A, B, & C. Floors, Backfill & Foundations.

Since May 1955, I have repeatedly reported, both verbally and in writing, on the conditions of the floors, backfill and foundations for the above contracts. On all three contracts the screeds have cracked excessively, the floor concrete is weak and the backfill comprises, for the most part, large boulders - unconsolidated with many voids.

I recommended that the screed, floors and backfill should be taken out and the whole relaid to specification at the estimated cost of £70 per unit. (This estimate has now been proved reasonably accurate - pilot scheme - Part A. Block 14). This method was dropped in favour of an alternative whereby the floors were left until major defects occurred, and then to break up the existing floors and consolidate them with the hardcore, which should have reached maximum settlement, a new floor would then be laid. This was considered the most economic solution.

Two factors now affect this method -

- (A) That so many defects are having to be attended to daily, that it is considered uneconomic to continue repairing them, or to lay screeds to incomplete floors.
- (B) The doubtful nature of the foundations to all blocks in all three contracts. Recent inspections have revealed that most blocks are founded on black cotton soil up to a maximum of two feet.

Underpinning of the foundations is expensive and difficult and in view of the fact that the floors and backfill will have to be attended to, apart from all the raking out repointing and miscellaneous repairs to be carried out, I can only recommend that the buildings be demolished and rebuilt.

If it is possible, I suggest that in addition to suing the contractors for this work, we sue them for loss of rent.

Sd. R.F. MOULD.

Exhibits

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Report by Architect, African Housing 6th February, 1956.

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Exhibits

# EXHIBIT "G"

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# REPORT BY ARCHITECT, AFRICAN HOUSING

25th July, 55

Report by Architect. African Housing.

25th July, 1955.

Mr. Saunders. Acting City Engineer.

Re: Ofafa Estate, Parts A, B and C, Stage 1, Contracts 60, 73 and 75.

I am not prepared to pass completed blocks for the above contracts, some of which have been ready for at least a month.

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The unsatisfactory work occurs mostly below the site concrete.

(1)The hardcore back filling has not been laid and rammed in six inch layers as specified. The back filling contains rocks up to 18" in size, there are voids left between individual stones, and settlement is taking place. As I mentioned in a previous memo to you, I esti-mate that ultimate settlement will take place in about two years and that serious damage to the floors can be expected.

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(2) The mortar jointing below the floor concrete is well below the specified 1:4 mix. A considerable amount of water seeps through this walling, and I have seen as much as 15" of water flooding the backfilling. This water movement, in time, is bound to wash the joints out and settlement of the walls take place, and cracks possibly occur right up to the wall plate.

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My recommendations are:-

- (a) Where cracks and hollows in floors occur that the whole floor be taken up and the back filling rammed and filled properly and the floors relaid.
- (b) All external walls below the floor slab be exposed and all defective mortar picked out to a depth of 2" and re-pointed with proper 1:4 mortar.

Sgd. Ronald Mould.

## EXHIBIT "H"

# REPORT BY ARCHITECT, AFRICAN HOUSING

Mr. Saunders, Acting City Engineer. 10th August, '55

# Re Ofafa Estate, Stage 1, Parts A, B and C

The roofs over the Ablution units, in particular Part "C" are spreading at the foot of the rafters. The beams spanning the openings are liable to be pushed over and the roofs collapse. The walls supporting the beams have already cracked. This is most dangerous and if not attended to promptly may result in a serious accident.

I suggest:-

- (1) That the beams be immediately shored up (Building Works could do this as the Contractor has packed up the site).
- (2) The Contractor be asked to take off all the tiles, reset the rafters, and fix ties to the foot spanning such set of rafters, and provide two trusses to each unit.

Although the materials used by the Contractor are to some extent suspect, the main fault lies in the design, I think the cost will have to be mainly borne by the Council (approximate cost will be £1,500).

Sgd. Ronald Mould, A/AHA.

# EXHIBIT "I"

# LETTER, A.E. WEVILL & SON TO CITY ENGINEER

The City Engineer, Town Hall, NAIROBI. 1st November, 1956

Dear Sir,

# Ofafa African Housing Estate

My estimates were based on the assumption that the repair Works would be carried out Departmentally by your own Maintenance Staff in the same way as those already done were carried out. If, as I understand, this method is not possible and they will have to be carried out by Contract the costs will be greater as their nature and method of execution

Exhibits

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Report by Architect, African Housing 10th August, 1955.

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Letter,
A.E.Wevill &
Son to City
Engineer.

1st November, 1956.

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Exhibits n Tu

Letter, A.E.Wevill & Son to City Engineer.

1st November, 1956 - continued.

will entail commencing and completing the Works in sections and not by a regularly employed maintenance gang. I estimate that a Contractor's rates would be at least 25% above those allowed by me.

The Contract method will entail also the preparation of a detailed Specification and supervision by a full time Clerk of Works.

I discussed with Mr. Mould our respective estimates for the required work. In the main the greatest difference was in under-pinning.

The view which I take is that the superimposed load on the foundations is very much below the loadbearing capacity of the concrete foundations and the decomposed rock sub-stratum and, except in cases where the concrete was very poor or where it rested upon black cotton soil, for the most part the fourdations were adequate. In consequence the provision I made for underpinning was relatively small whereas Mr. Mould had allowed a figure of £20,000 for this, based on the assumption that to comply with the Specification practically the whole of the work will require underpinning.

I do not consider from the trial hole tests that this is entirely the case but proof either way is not possible until such time as the foundations are exposed. I have considered the point very carefully and, whilst I do not feel justified in creasing my claim for underpinning, I did overlook the fact that pumping and damming up the sub-soil water will be necessary in practically every case and therefore would add a provision of £500 to cover this.

You asked for prior consideration to be given to Part "B" claim so we did not have time to go into more than this for the time being.

Based on the foregoing the figures given on pages 10 and 11 of my report for Part "B" may be amended as follows:-

# A. Estimated Cost of Repairs etc.

1. Foundations. (To improve Standard)

Shs.39,000.00 plus 25% = Shs.48,570.00

Provision for pumping,
Shs.10,000.00 Shs. 58,750.00

2. Floors. (to bring up to Specification Standard) Shs.310,000.00 plus 25% = 387,500.00 10

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	3. Superstructure Walling  (a) Raking joints and re-pointing externally. Shs.13,600.0 plus 25%  Shs. 23,250.00  (b) Dressing off, re-pointing, bag-	Exhibits "I" Letter, A.E.Wevill & Son to City
10	wiping and re-decorating inter- nally, etc. Shs.206,000.00 plus 25% = 257,500.00 (c) Damp Course (reduced value) 800.00 4. Roofs & Joinery	Engineer. 1st November, 1956 - continued.
	Reinforcing and re-spiking roof timbers. Shs. 23,500.00 plus 25% = " 29,315.00 Bolting hinges, etc.	
	Shs.5,800.00 plus 25% = " 7,250.00 Valley boarding and lining	
	(reduced value) 700.00	
	Raking up and re-laying.  Shs.2,000. plus 25% = " 2.500.00	
20	Shs.2,000. plus 25% = " 2,500.00  6. Repair work carried out by City Council	• •
	Repairs already done and not included above 15,000.00	
	New Items:-	
	Preparing Specification for repairs "1,500.00 Clerk of Works Salary and	
	office - (about 17 months) " 25,000.00	
30	Total value of Repair, etc. Works (£40,453.5.0.) Shs.809,065.00	
	B. Loss of Rent (whilst repairs in progress) Shs. 17,784.00	
	Mr. Mould has included in his figures a claim for non-provision of hoop iron. That supplied is below the quality specified and it's provision is haphazard. I have made no provision for this as the quantity deficient is difficult to prove and deep raking out and re-pointing with a good mix of cement will possibly compensate for lack of this.	

He also has claimed for the replacement of all damaged or broken concrete drains. I have allowed

Exhibits "I"

Letter, A.E.Wevill & Son to City Engineer.

1st November, 1956 - continued. that some of these have been damaged by Council and other transport since they were put down.

The question of a claim for defective or non-existent damp course is a difficult one to solve. The cost of inserting one would cost nearly as much as demolishing and re-building. I suggest that should damp appear in any of the superstructure walls the mortar bed at damp course level in such places is cut away and a strip of metal cored damp course is inserted. I saw very little of rising damp in the sign walling consequently I am not in a position to estimate how much of this would be required and what the cost would be for depreciated value and increased maintenance sosts.

With reference to the future seven items mentioned in your report dated 25th October.

The rafters as provided are spaced as shown on the th scale plan.

Re-decoration of walls re-treated is provided for.

Such damage as has been done to the rendering in the ablution rooms appeared to be caused by rough treatment.

Purlins are shown on the type drawing but may have been omitted in some Blocks under Clerk of Works instructions.

Joinery undersized and of poor workmanship and flush doors are very obvious defects due to causes which a reasonable examination could have disclosed before they were paid for and, in consequence I have not claimed for them specially. They are also items which strengthen the case for claims in respect of increased maintenance and reduced value.

Yours faithfully,

Sd. A.E. Wevill.

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EXHIBIT "J"

# OF MAINTENANCE PERCENTAGES

# Ofafa Estate

The following table applies this to increased annual Maintenance Fund contributions at varying levels, for a capital sum of £85,000 and £110,000. The present value of an annual payment of £1 for 40 years on a 3% basis is £23.114772.

lue Based on £85,000 Capital Value Additional Present Value nal Contribution of additional contribution.		425 9,824	850 19,648	1,275 29,471	1,700 39,295	2,125 49,119	2,550 58,943	2,975 68,766
000 Capital Value Present Value of additional contribution	C#X	12,713	25,426	38,139	50,852	63,566	76,279	88,992
Based on £110,000 Capital Value Additional Present Value Contribution of additional per annum contribution	đ3	550	1,100	1,650	2,200	2,750	3,300	3,850
Additional over sten- dard let	ુર્	riloz	Н	HQ H	C)	<b>γ</b> -ήα	M	5. 4.50
Total Main- tenance Fund Contribution	0/ 3/1	N.	21	80	32 22	4	42	רט

City Treasurer's Department Town Hall, Nairobi.

ASSISTANT CITY TREASURER.

8th July, 1957.

# Exhibits uju

Schedule of Maintenance Percentages. 8th July, 1957.

Exhibits "K"  Schedule of Claims  14th November, 1956.	~		s. Shs.Cis.						58,750.00						Shs. 587,500.00	446,250.00
		onst	Sha.Cts				38,967.20 9,741.80	10,000,00	00.001.000			509,629.00	509,639.10	77,409.80		
		Con als	Shs.Cts.	253.25	21,193.20 6,358.05	10,145.70		e of water	ies: Say	9.23	55,423,60	69,279.50 175,506.80 192.00		Sha	Say:-	ed Forward
	SCHEDULE OF CLAIMS	T "B" - Ata- ciencies in	T. Foundations:	C.F. 1013 @ -/25 C.F. 226 @ 4/50	740 142,38	internally (	it.	Add: Cost of pumping and baling to keep foundations free	Plus Contingencies	(6)	ing under last and remove cotton soil		l at rates for work carried out De permanent Maintenance Staff	Add: extra cost for work done by Contract	Plus Contingencies	Garried

	1		446,250.00	
Colour wash on ditto after pointing S.F.12120 @ -/30	14,937.20			
Raking and Pointing externally (To improve standard). Total at rates for work carried out Departmentally by Permanent Maintenance Staff:- Add:- Extra cost for work done by Contract -	Shs.	18,573.20 18,573.20 4,643.30 23,216.50 Shs.	23.250.00	
(b) Dress of internal face of walls, flush point, bagwipe and twice lime wash. S.F.279,081 @ -/70 Ditto and point up ends of Gubicle walls 4" wide 7.1½" high. No.168 @ 3/50 Gut chamfer 1½" wide at sills externally L.F.4,270 -/10 Take out door frames provide and build in cramps and re-bed and point No.845 @ 5/- Ditto shutter and louvre and ditto No.1080 @ 3/- Ditto Ablution door frames and bolt together No.192 @ 5/- Take up and re-lay steps L.F.780 @ 1/- Gut out for and build in cramps as bond to boundary walls No.54 @ 2/- Total at rates for work carried out Departmentally by Permanent Maintenance Staff:- Add:- Extra cost for work done by Contract:  Rlus Gontingencies:- (c) Damp Course (reduced cost) S.F.13529 @ -/06	195,356.70 588.00 427.00 3,240.00 3,240.00 780.00 108.00	205,689.70 205,689.70 51,422.42 257,112.12	N	

# Exhibits

a K a

Schedule of Claims.

14th November, 1956

- continued.

Exhibits "K"  Schedule of Claims.  14th November, 1956 - continued.	Shs.Cts.		727,800.00 727,800.00		29,315.00		700.00				7,250.00
	Shs.Cts.		23,494.70	5,494 5,818 9,313	Say Shs.		710.50				
	Shs.Cts.	2,748.80 5,850.50	23,494.70 23,494.70			406.00	OC 0 4.00	2,114,00	1,824.00	5,802.00 1,450.50 7,252.50	
	Ofafa Estate Part "B" (Contd.)	IV. Roofs & Joinery:  4" x 2" Collars and braces. B.F.12412 © 1/20  Holing and clench nailing junctions rafters, etc.  No.13744 @ -/20  4" x 2" wall plate & ties B.F. 3901 @ 1/50	Brought	inners & Spiking at rates for work Extra for work dor	( <del>-</del>	2. A 1. 1111EUS 1888 5.F. 812 @ -/50 Wide less cost 15" Wi	Valleys & Linings (Reduced value)	Hinges etc. (to bring up to Specification Standard) Joinery: Hole for and bolt hinges through doors	Ditto, through shutters No.1824 @ 1/- Self closing hinges to Ablution doors. Pairs 288 @ 3/-	Total at rates done by Maintenance Staff:- Add: Extra for work done by Contract	Say

Sha, Cta.	She dts.	Shs.Cts.
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047.00		
160.00		
	1,968.00	
Shs	2,460.00	
ì		2,500.00
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ì	25,000.00	26,500.00
	Shs	809,065.00
4, 2,	Shs.Cts. 843.00 965.00 160.00 60.00 60.00 540.00	1, 26, 14, 14, 25,

# Exhibits u Ku

Schedule of Claims.

14th November, 1956 - continued.

# Exhibits

# A.E. WEVILL & SON, Architects.

The City Engineer, Town Hall, Nairobi. P.O. Box 17, NAIROBI

14th Movember, 1956

Dear Sir,

# Ofafa African Housing Estate PART "C"

Further to my report forwarded to you on the 21st August, and our discussions thereon more particularly relating to items not specifically claimed for and the method you propose to adopt in carrying out repairs etc.

The ruling principle throughout my report is that the claims put forward cover defects and deficiencies which have been exposed and can be conclusively proved or which affect the stability of the structure.

In the case of foundations I have considered that the bearing capacity of the substratum, except where the black cotton soil has not been removed, is adequate to carry the superimposed load and only where the black cotton soil remains or the concrete foundations are inadequate or non-existent, will underpinning be necessary. The full extent of this can only be ascertained when the foundations are exposed for re-pointing the external faces of the foundation walling and when the filling under the floors is removed. I have made a claim for underpinning in such places where the test holes revealed the defect. The cost of any further deficiencies revealed in later works should be covered by the claim for increased maintenance costs.

I did however overlock the necessity for pumping and keeping the excavations clear of water and mud whilst the repair works are in progress. Subsoil water is present practically throughout the site and this will be a costly item. I consider an item of £500 should be added to cover this.

The quantity and quality of hoop iron bond in the walling can only be a matter of conjecture until such time as all the pointing is raked out for repointing. No specific claim has been made in this respect as I considered deep raking out of the joints and re-pointing in good cement mortar would largely compensate for any deficiency in hoop iron.

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Should cracks occur after this has been done the remedy would be to insert metal cramps, the cost of which would also be provided for in the claim for increased maintenance.

Exhibits

The presence or otherwise of a damp course and its quality and efficiency is also open to doubt, but is not one upon which a definite claim can be substantiated. Good pointing to both faces of the foundation walling and filling under the floors with good material thoroughly consolidated will reduce the risk of damp rising in the walls above floor level.

The quality of the joinery is not of a high standard and in some cases specified sizes have not been adhered to but, beyond the reinstatements claimed for, I do not think the deficiencies will affect stability or life of the structure.

# The City Engineer, Nairobi - Ofafa Housing Estate, Part "C"

In preparing my original report I assumed that the method to be adopted in carrying out repairs, replacements, etc., would be the same as that you used in carrying out the repairs already done. I now understand that you have no maintenance staff available and that the work must of necessity be carried out by Contract. This will materially affect the cost, as a Contractor could not carry it out as a straightforward start to finish Contract but would be required to commence and complete it in sections. The cost of carrying it out by this method and under these conditions would be at least 25% higher than by the method I visualised. All claims for works must be increased to this extent.

In addition to this it will be necessary to prepare a detailed Specification of the Works and to employ a full time Clerk of Works, with an office on the site, to supervise them. These costs should also be added to the claim.

In consideration of the foregoing the claim should be amended as follows:-

### I. Foundations:

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Excavating, underpinning, concrete foundations and re-pointing walling (to improve standard)
Shs.30,500/- plus 25% = Shs. 38,125.00
Extra for pumping, etc. 10,000.00

Exhibits	II. Floors	
u Ku	Taking up, removing and replacing filling and relaying (to Specification standard) Shs.196,600/- plus 25% = Shs.245,750.00	
	III. Superstructure	
	Repointing externally (to improve standard) Shs.13,000/- plus 25% = " 16,250.00 Dressing off etc. internally (to 10	
	Specification standard) Shs. 138,000/- plus 25% = " 172,500.00	
	Damp course (reduced value) " 600.00	
	IV. Roofs and Joinery:	
	(a) Reinforcing roof timbers (to improve standard) Shs.12,000/- plus 25% = " 15,000.00 (b) Bolts and hinges, new door, etc. (to Specification	
	standard) 20 Shs.4,000/- plus 25% = " 5,000.00 (c) Valleys (reduced value) = " 1,100.00	
	V. Drains	
	Taking up and re-laying (to Specification Standard) Shs.15,000/- plus 25% = " 18,750.00	
	VI. Repair Works already carried out:	
	Investigations and repairs by City Council, less portions included in foregoing 12,000.00 30	)
	Further Items: Preparing Specification for repairs 1,000.00 Clerk of Works - Salary and Office 17,000.00	
	Total Value - Repairs etc. (226,800) Shs. 553,075.00	
	Loss of Rent: Whilst repairs are in progress Shs. 12,558.00	
	The foregoing, I think cover the points we discussed and the items in your report upon which you asked me to comment.	
	Yours faithfully, 40	)

Sd. A.E. Wevill.

# EXHIBIT "L"

# REPORT BY K.F. STONE

# REPORT NO. 2

# OFAFA ESTATE STAGE 1

# PARTS A & B. CONTRACTS NO.60 N.73

Two months ago I took over the site supervision of the above contracts. The standard of work I found was below that stated in the Specification. The Contractors were well below Schedule. My aim was to raise the standard of work and concentrate on getting the contracts completed as quickly as possible.

Work which was in an advanced stage I ordered to be completed, paying particular attention to the finishes. Other work especially on Part 'A' I ordered to be held up temporarily, enabling the labour to be concentrated on completing other work, whilst in due course permitting me to make a thorough inspection of the less completed work which appeared to be unsatisfactory, and proved to be so —

Yes, Mr. Mould took over on the 14/3/55.

I had not received any assistance from the Architect Mr. Tanner in the past and was pleased to be given attention such as Mr. Mould did on his taking over.

The work was inspected and stated was in parts below standard, this I maintained was due to insufficient assistants. Such as foreman and the large volume of work I had to look after.

FOUNDATIONS - As stated in the report.

WATLING BELOW FLOOR SLAT This I have found defective in most cases. The
mortar mix should be 4-1 but I found it is of such
a consistency that I can break and crumble it in
my hands. It is often mixed with pointing of a

I have dealt with this in Report No. 1 - The Contractor and his mistry were instructed to mix the mortar 4-1 for the foundations and when my assistant (African) or myself stayed near the mixer it was made 4-1 but when we left for other work and returned we found that the Contractor had altered the mix. This was brought to the notice of the Architect on Site

Exhibits

a T a

Report by K.F. Stone.

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stronger mix.

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Exhibits

Report by K.F. Stone - continued.

HARDCORE.

There was only one unit on which the floor had not been laid where hardcore was exposed - This I found had not been graded and consclidated as required - This I ordered to be taken up and properly backfilled. I asked to be advised when this was completed, so that I could inspect it. I was told that the work had been carried out but I could not inspect it as the Contractor had laid the site concrete.

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I was present when the Architect Mr. Mould instructed the mistry to grade the filling. I myself found the Site concrete cost and was informed that the filling had been dealt with. I was informed by the mistry and his fundies.

# SITE CONCRETE AND SCREED

The site concrete is a Specified mix 1:3:6 with a covering screed of 1:4 mix.

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A large proportion of the floors had developed cracks and hollows. I ordered them to be cut up and made good wherever necessary and in one case had a complete floor relaid. However these faults still persisted and I became quite concerned about it.

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I had several floors hacked up - some I did myself with a hand pick. I found the concrete once penetrated with the pick could in many cases be pulled apart by hand.

Hollow pockets were also revealed in the hard core due to either settlement or lack of proper consolidation. The screed was generally good.

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- (1) I have dealt at length in report No.1 on the hardcore filling and consolidation and I think this applies
- (2) The Concrete for the floors was mixed in Mixers. The ballast had to be removed on many occasions due to bad grading there were many heated arguments with the Contractor on this matter.

I have shown Mr. Tanner the Architect (when had been on site) the type of stone ballast supplied. 4

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As for the mortar when one stood at the concrete mixer the correct proportions were added - When the back was turned it was altered - The concrete was cast on Saturday afternoons and Sundays. It was impossible to keep the matter under constant supervision - I did not have sufficient assistance.

I requested the architect Mr. Tanner to stop Saturday afternoon and Sunday work he stated it was the custom of the Asian contractor to work during this period in order to hasten completion.

The Contractor and his mistry and his fundies were very difficult to deal with.

# WALLING

The walling above the floor slab has been found to be defective at joints - The mortar mix-ture should be 1:6 like the walling below the floor slab, can easily be raked out and crumbled by hand. A lot of the walling is out of Plumb.

Some walling proved to be so unstable that it gave way when pushed, in fact several parts of the walling collapsed with one or two blows with a six foot length of  $4" \times 3"$  timber.

The mortar joints parted freely from the stone work and were easily broken by hand. No hoop iron reinforcement at all had been used in this particular walling -

Walling in part 'B' has hoop iron reinforcement but I am doubtful whether this is inserted to the full height of the wall.

I have one constructed in the same faulty manner and not parged.

There is certain defective walling and I think this refers to Blocks 11 and 13 as explained in Report No.1 - I did not exercise supervision over this - I had Blocks Nos. 2 to 7 to get ready also Blocks No. 35 and 36 to Part II Contract. - I was moved off the site when the Superstructure to the Blocks 11 and 13 were on hand.

The walling work on Blocks 23 and 24 were brought to the notice of the Contractor on several occasions during construction - I did not get any notice taken of my instructions and reported the matter to the architect Mr. Tanner who spoke to the Contractor re his work.

It was at this time I requested the architect Mr. Tanner to remove the contractor from the site and close the contract.

I was informed that a Contractor would not be available to complete the work.

# R.C. WORK

Part 'A'. The R.C. Work is definitely below

Exhibits

Report by K.F. Stone

- continued.

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Exhibits "L"

Report by K.F. Stone - continued.

standard - the concrete does not conform to a 1:2:4 mix several lintels were cut open and the reinforcing rods were found to have been omitted, cracks had appeared in the lintels, some buildings had developed a noticeable sag and it appears that only a wall plate is supporting the frames.

The lintel which spanned a verandah was found to be cracked. It was easily pushed off the wall and despite some reinforcement broke on hitting the ground.

In connection with the lintels as explained in detail in Report No.7. There was reinforcement but the lintels were revised when they were set in position by the fundies - I gave instructions for these lintels to be cast with the steel at the bottom and a letter T to be marked on top of the lintel - The Contractor failed to do this with the result they were set incorrectly.

This was a difficult case to detect and it was not until cracks appeared in the lintels that it was found they had been set upside down.

Again the R.C. lintels were cast without any warning or notice that they were ready to receive the Concrete.

For my assistant would arrive at the blocks and find the R.C. lintels cast and was therefore unable to certify what mix the Contractor had used.

The R.C. beams referred to would appear like those of Block No.B and as stated I could not supervise this block at superstructure level.

### Doors & Frames:

There are many frames fallen out of square but what is proving troublesome is the manner of fixing. All frames should be properly secured to the walls with metal cramps (not angle iron) This is not being done, wooden plugs are inserted into the braces and frames nailed to them. The plugs often split and in many cases are 1½ from the frames so that the nail only penetrates the plug a small amount. A considerable number of the frames ledged and braced and battened doors on Part A were condemned. Further deliveries were stopped and doors were ordered. (Mr.Tamor). The

Contractor was asked to have the condemned doors satisfactorily refused. It took months to get the Contractor to do this. In most cases the doors were in a worse state after repair than they were before and had to be finally condemned.

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I have dealt with this at great length in Report No.7.

Exhibits

# Windows - Frames and Shutters

Report by K.F. Stone

Dealt with in Report No.7.

- continued.

## Wooden louvres.

This is correct.

# Rafters, Battens and

Dealt with in Report No.7.

# Tiles.

Mr. Mould the Architect is in possession of the facts concerning the tiles.

# Flushings.

The Architect Mr. Tamor issued a flow of the flushing. This however proved to be too expensive to produce. The Architect agreed to accept the present type of flushing after one had been constructed on site.

It is the usual asian type and was agreed to by the Architect.

# 20 Whitewash and Colour wash

Yes, what is repainted is correct.

# Wood preservative.

A better effort was made at the start of roofing when the Contractor provided the long trough and dipped the podo into this with what appeared to be a light local wood preservative applied by the oil Company.

The Specification states "Creosote" or other approved wood preservative.

I could not condemn the material supplied for it was from a good firm of suppliers. What I think happened but I could not prove it was that a certain amount of limp Black was ordered.

The Contractor on Part "A" is generally most uncooperative and is continually contravening the Clerk of Works instructions thus occasioning many unnecessary delays in the completion of the work. His organisation is bad and his continued practice of letting to sub-contractors is unsatisfactory. He is seldom found on the site, and it is only recently that a foreman has been produced who can speak and write English as stated in the Contract.

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Exhibits
"L"

Report by
K.F. Stone

- continued.

I think this seems not what I had to deal with for many months. I did not receive the support I should have done from the Architect Mr. Tamor. I had far too much to do and no assistance to help me with the large volume of work.

The Contractor on Part "A" was most difficult and elusive.

Sgd. K.F. Stone.

P.S. Please read the notes which were sent into the Architect every week and monthly. They accompanied the progress reports and were sent to Mr. Tamor.

Sgd. K.F. Stone.