

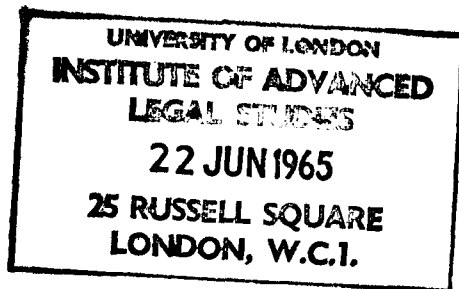
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In the Privy Council

Judgment
10 1964

No. of 1962

ON APPEAL FROM THE COURT OF APPEAL OF NEW ZEALAND



- 78545

Between CHARLES MORGAN

Appellant

and NAJO A. KHYATT

Respondent

RECORD OF PROCEEDINGS

CHARLES MORGAN
Appellant in Person

C/o New Zealand House,
~~415 Strand, HAYMARKET~~
London, ~~W.C.2~~ S.W.1 .
~~Buddle Anderson Kent & Co.~~
~~c/o~~ Wray Smith & Co.
1, King's Bench Walk
Temple
LONDON

Solicitors for Respondent

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IN THE SUPREME COURT OF NEW ZEALAND. NO _____

WELLINGTON DISTRICT
WELLINGTON REGISTRY

BETWEEN NAJLO A. KHYATT of
No.316 Oriental Parade,
Wellington, Widow

Plaintiff

A N D C. MORGAN of No.314
Oriental Parade, Wellington,
Traveller

Defendant

STATEMENT OF CLAIM

Thursday the 14th day of April, 1960.

THE PLAINTIFF by her Solicitor, GEORGE CECIL KENT, says as follows:-

1. THE Plaintiff is the owner and occupier of certain premises situate in the City of Wellington and known as No.316 Oriental Parade.
2. THE Defendant is the owner and occupier of certain premises also situate in the City of Wellington being contiguous to those of the Plaintiff and known as No. 314 Oriental Parade.
3. THAT upon or adjoining the boundary line separating the Plaintiff's and Defendant's property there is a concrete retaining wall.
4. THAT on the Plaintiff's side of the said boundary line sewerage and stormwater drains have been placed and they have been in use for many years.
5. THAT the Defendant or his predecessors in title have planted or permitted the growth of several trees behind the concrete retaining wall on the Defendant's side of the said boundary line.
6. THAT the Defendant has wrongfully allowed the said trees to continue in growth until their roots have penetrated the said concrete retaining wall and have entered the Plaintiff's property.

7. THAT due to the said wrongful neglect of the Defendant the said roots have both penetrated and thrust forward the said concrete retaining wall and have caused it to crack and overturn at points along its length.

8. THAT by reason of the weakening and cracking of the said concrete retaining wall, as aforesaid, there exists a continuing danger that the whole wall may collapse and large quantities of earth and spoil may be thrown forward upon the land of the Plaintiff.

9. THAT the said roots have further grown into the Plaintiff's property and have penetrated, obstructed and forced open the sewerage and stormwater drains on the Plaintiff's property, causing considerable inconvenience and much expense to the Plaintiff.

10. THAT the Plaintiff cannot satisfactorily renew the said sewerage and stormwater pipes until the Defendant has removed the said trees from the boundary.

11. THE Defendant has been several times requested by the Plaintiff to discontinue or desist from the trespass or to abate the nuisance hereinbefore described but has refused and continues to refuse to do so and the Defendant still continues and unless restrained will continue the said trespass or nuisance by permitting the growth of trees whose roots have caused the trespass, nuisance and damage as aforesaid.

12. THE Plaintiff therefore prays judgment for :-

A. An order that the Defendant do forthwith remove from, upon, or alongside the said boundary the said trees and that the Defendant remove from the land of the Plaintiff the roots or the said trees:

and/or

B. An injunction to restrain or prevent the Defendant from at any time permitting the growth or planting of any trees, shrubs or hedge likely to cause the trespass and nuisance as aforesaid;

and/or

C. Such order as is fair and reasonable and to be necessary to remove or prevent the recurrence of the nuisance and damage aforesaid and undue interference with the reasonable enjoyment of the Plaintiff's land for residential purposes;

and/or

- D. The sum of SEVEN HUNDRED AND TWENTY SIX POUNDS (£726. 0. 0.) as damages, being the cost of repairing the concrete retaining wall and the sewerage and stormwater drains;
- E. The costs of and incidental to these proceedings;
- F. Such further and incidental relief as this Honourable Court shall deem just.

THIS STATEMENT OF CLAIM is filed by GEORGE CECIL KENT Solicitor for the Plaintiff whose address for service is at the Offices of Messrs. Buddle, Anderson, Kent & Co., Solicitors, 154 Featherston Street, Wellington.

IN THE SUPREME COURT OF NEW ZEALANDNO. A149/60WELLINGTON DISTRICTWELLINGTON REGISTRY

BETWEEN NAJLO A. KHYATT of No.316
Oriental Parade, Wellington,
Widow

Plaintiff

AND C. MORGAN of No.314 Oriental
Parade, Wellington,
Traveller

DefendantSTATEMENT OF DEFENCE

Wednesday, the 27th day of April 1960

The defendant by his Solicitor, KEITH TAYLOR MATTHEWS
says as follows:-

1. HE does not know and therefore denies the allegation
contained in Paragraph 1 of the Statement of Claim.

2. HE admits the allegation contained in Paragraph 2
of the Statement of Claim.

3. HE admits that there is a concrete retaining wall
between the property owned by himself and No.316 Oriental
Parade, but as to whether the said wall is on the boundary
line he is unaware and he therefore denies the allegation
contained in Paragraph 3 of the Statement of Claim.

4. HE admits that on the side of the concrete retaining
wall boundary occupied by No.316 Oriental Parade there are
sewerage and stormwater drains, but whether they have been
in use for many years he is unaware and therefore denies
the other allegations contained in Paragraph 4 of the
Statement of Claim.

5. HE denies the allegation contained in Paragraph 5
of the Statement of Claim.

6. HE denies the allegation contained in Paragraph 6
of the Statement of Claim.

7. HE denies the allegation contained in Paragraph 7
of the Statement of Claim.

8. HE denies the allegation contained in Paragraph 8 of the Statement of Claim.

9. HE denies the allegation contained in Paragraph 9 of the Statement of Claim.

10. HE denies the allegation contained in Paragraph 10 of the Statement of Claim.

11. THE defendant admits that he has received a number of communications from the plaintiff, but otherwise denies each and every allegation contained in Paragraph 11 of the Statement of Claim.

12. IN so far as Paragraph 12 of the Statement of Claim contains any allegation against the defendant he denies the same.

This Statement of Defence is filed by Keith Taylor Matthews, Solicitor for the Defendant, whose address for service is at the offices of Messieurs Duncan, Matthews & Taylor, Solicitors, 140/150 Lambton Quay, Wellington.

IN THE SUPREME COURT OF NEW ZEALAND

NO. A149/60

WELLINGTON DISTRICT

WELLINGTON REGISTRY

BETWEEN NAJLO A. KHYATT

Plaintiff

A N D C. MORGAN

Defendant

AMENDED STATEMENT OF DEFENCE.

Friday the 1st day of July, 1960.

The defendant by his solicitor Keith Taylor Matthews says as follows:-

1. IN answer to the allegations contained in Paragraph 1 of the Statement of Claim, he does not know if the plaintiff is the owner of the premises situate in the City of Wellington, and known as 316, Oriental Parade, and therefore denies the same. He admits the plaintiff is the occupier of the said premises.

2. HE admits the allegations contained in Paragraph 2 of the Statement of Claim.

3. HE admits that there is a concrete retaining wall between the property owned by himself and No.316 Oriental Parade, but he does not know whether the said wall is on the boundary line separating the property known as No.316 Oriental Parade from his property and he therefore denies the allegations contained in Paragraph 3 of the Statement of Claim.

4. HE admits that there are certain sewerage and storm-water drains connected to the house property occupied by the plaintiff at 316 Oriental Parade. Whether these sewerage and stormwater drains have been in use for many years or whether the same are laid upon the property occupied by the plaintiff he is unaware and he therefore denies the allegations contained in Paragraph 4 of the Statement of Claim.

5. THE defendant admits that on the property occupied by him at 314 Oriental Parade there are several trees and he

further admits that there is either on the property occupied by the plaintiff or the property occupied by the defendant or partly on the one and partly on the other, a concrete retaining wall, but as the defendant does not know where the said retaining wall is situate he therefore denies each and every other allegation contained in Paragraph 5 of the Statement of Claim.

6. THE defendant denies each and every allegation contained in Paragraph 6 of the Statement of Claim.

7. THE defendant denies each and every allegation contained in Paragraph 7 of the Statement of Claim.

8. THE defendant denies each and every allegation contained in Paragraph 8 of the Statement of Claim.

9. THE defendant denies each and every allegation contained in Paragraph 9 of the Statement of Claim.

10. THE defendant denies each and every allegation contained in Paragraph 10 of the Statement of Claim.

11. THE defendant denies each and every allegation contained in Paragraph 11 of the Statement of Claim.

AND FOR A FURTHER DEFENCE the defendant says:-

12. HE repeats the various admissions and denials contained in Paragraphs 1 - 11 hereof.

13. IF it should be proved that any damage has been caused by the said roots (which is denied) to the property now occupied by the plaintiff, then the defendant says that such damage was completed prior to the date when the plaintiff became occupier of the said property and that the protrusion of roots from trees on the defendant's property had prior to such date ceased to be the cause of any damage (which damage is denied) that might have occurred after such date.

AND FOR FURTHER DEFENCE the defendant says:

14. HE repeats the various admissions, denials and allegations contained in Paragraphs 1 - 11 and 13 hereof.

15. IF it should be proved that any damage has been caused by the said roots (which is denied) to the property now occupied by the plaintiff, the defendant says that such damage was caused in whole or in part more than six years before the 14th day of April, 1960 (being the date on which the proceedings herein were brought by the plaintiff) wherefor the defendant pleads the Limitation Act 1950 to bar, as the

case may be, the whole of the plaintiff's claim or such part thereof as may be referable to damage caused by the said roots prior to the 14th day of April, 1954.

AND FOR A FURTHER DEFENCE the defendant says:-

16. HE repeats the various admissions, denials and allegations contained in Paragraphs 1 to 11 and 13 and 15 hereof.

17. IF it should be proved that any damage has been done to the wall hereinbefore referred to then the defendant says that such damage was suffered by the wall because of its faulty and poor construction, the said wall being constructed of concrete with no strength or stability and no re-inforcement.

AND FOR A FURTHER DEFENCE the defendant says:-

18. HE repeats the various admissions, denials and allegations contained in Paragraphs 1 to 11, and 13 and 15 and 17 hereof.

19. BY requesting and approving of the cutting of the said roots the plaintiff elected to have the said alleged nuisance abated and is now barred from pursuing any claim (which claim is denied) in damages or for an injunction in respect of the said alleged nuisance.

AND FOR A FURTHER DEFENCE the defendant says:-

20. HE repeats the various admissions, denials and allegations contained in Paragraphs 1 to 11 and 13, 15, 17 and 19 hereof.

21. IF it should be proved that any damage has been caused by the said roots (which is denied) to the property now occupied by the plaintiff, the defendant says that the plaintiff has suffered the said damage (which damage is denied) partly as a result of her own fault.

22. THE plaintiff's said fault consisted in:

(a) Failing to abate the alleged nuisance after the plaintiff first became aware thereof

or

(b) Failing to request the defendant to abate the alleged nuisance after the plaintiff first became aware thereof

or

(c) Failing to take such measure as were practical and reasonable in the circumstances to prevent or mitigate the damage caused by the said roots after the plaintiff first became aware of the protrusion of the said roots.

This Statement of Defence is filed by KEITH TAYLOR MATTHEWS, Solicitor for the Defendant, whose address for service is at the Offices of Messrs. Duncan, Matthews & Taylor, 140-150 Lambton Quay, Wellington.

IN THE SUPREME COURT OF NEW ZEALAND.
WELLINGTON DISTRICT
WELLINGTON REGISTRY

NAJLO A. KHYATT v. C.MORGAN.

Hearing - 18 April, 1961.

Counsel - Kent for Plaintiff (with Mr.McKenzie)
 Barton and Schellevis for Defendant.

NOTES OF EVIDENCE TAKEN BEFORE THE HON.
 MR.JUSTICE LEICESTER.

MR.KENT OPENS AND CALLS

RESPONDENT'S EVIDENCE MR.KENT COUNSEL	<p>Mrs. NAJLO ANGELINE KHYATT. I am a widow residing at 316 Oriental Parade, Wellington. I own that property, and occupy it as a residence. Part of it is let - two flats. I purchased the property in April 1955 from the Public Trust. The property on the southern boundary is occupied by Mr.Morgan, who was in occupation at the time I purchased my property. As to access to my property, is obtained by a narrow right of way between houses, then a zig zag path with steps. The zig zag path is smaller at the bottom and then there is a big path running from one boundary to the other, It is a fairly steep zig zag. On the right hand side as we approach the properties, there is a concrete boundary wall separating the properties. I have no knowledge of concrete walls. I now ask leave to produce photographs of that wall (EXHIBIT AH). There are eight photographs in all. They were taken by a commercial photographer and they show various views of the concrete dividing wall and the trees which I complain of are seen growing in the photographs. The photographs were taken late last year, and represent generally the position now. They are a fair representation of the situation when they were taken, and the situation as it is to-day. One photo gives a more overall picture of the approach, (EXHIBIT 1A.) There is also one showing the damage done to the concrete facing at the rear of my path which is on the final stages of the zig zag (EXHIBIT B). The other photographs are general views. When I purchased the property I only noticed one crack on the wall, about one inch wide. It was towards the top of the wall and extended in between the two zig zag paths. That crack did not give me any concern at the time. In the early stages I had no trouble with my drains but there was trouble on Mr.Morgan's side near the house. That trouble was early on, but I could not say what year. I reported that trouble to Mr.Morgan, as there was spoil spilled over into my property. I had the matter looked into by a drainlayer</p>	<p>10</p> <p>20</p> <p>30</p>
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and the trouble was found to be on Mr.Morgan's side of the boundary. As to the proximity of the trees, I approached Mr.Morgan one Saturday morning, not very long after I bought the property. I told him he would have to do something about the trees as I found they were a nuisance and I had to clean up the paths all the time. He said they were nature. I told him I loved nature too but not when it was a nuisance to other people's property. I pointed out the crack in the wall and he said that had been there a long time. He then said he would do something about the trees. He did nothing, but in 1960 he topped the trees and topped other trees, more or less clearing his own land. I did not see any steps being taken to eradicate the nuisance. When I saw him I told him I would take some branches from my side, which I did. Prior to 1958 I did not know anything about the drains. I became aware of the position about August that year. In August 1958 I went down the steps and saw all seepage on my side, going down the steps. It was apparent this came from the drains. It was coming from the top of the concrete wall, where the zig zag steps ended at the bottom. It was where the big zig zag begins. I was at that time not on good terms with Mr.Morgan as I had been involved in some litigation in the Magistrate's Court, brought some time prior to 1958. I had recovered a judgement for certain moneys, but this has no relation to the present trouble. Because of that strained relationship, I notified the Health Inspector and then I got in touch with Mr.Davies, my plumber. As a result of what I was told I then notified my legal advisor. The seepage was not of a minor character, but came right down to Oriental Parade. I was not present when Mr.Davies opened up the drain. In order to get to the drain he had to knock out some of the concrete wall both at the top and bottom of the wall. After he had attended to the drains, I noticed roots on my path. He left them to let me see what he had taken out of the drains. That was the first time I knew that the drains were in the concrete wall. My solicitors wrote a letter to the defendant's solicitors dated 4th August 1958. A copy is produced. I knew of the contents of the letter at the time it was sent. I did not receive any reply personally, and I have been advised that no reply was ever obtained. Nothing was done in regard to the trees following upon that letter. Running down behind the concrete wall there are some Pohutukawa trees, as well as others I don't know the name of. The Pohutukawa trees are very large and the trunks and branches are behind the concrete wall and spread out like an octopus. Some of the branches of the trees are above the wall, right close to the wall. The trees are quite hard up against the wall. Behind my concrete wall is another concrete wall which is slightly lower than mine by a matter of inches and it is behind that second concrete wall that the trees are. The second concrete wall runs the full length of my concrete wall. The walls are hard up against one another. At the top Mr.Morgan's wall is cracked. His drain must also be in

the wall, as I have seen him poking with a long stick. The trees are more proximate to his drains than they are to mine. There are seedlings on his section. His seedlings are larger. I have no corresponding trees on my section. I have some tau..... on the north side of my section. I do not know the width of my section. I have no Pohutukawas, only seedlings from his. The Pohutukawa trees - the seedlings and walls contain many. Trees are growing up from the roots in the wall. On the facing going up to my home are all little seedlings. There are also some other seedlings. There is not much growth on my side other than the seedlings. When I first went to the property, the concrete wall at the back was in quite good condition until just before the photos were taken when part of it came down. I had a young boy over to clean up and he cut some of the seedlings off which had come through the concrete. Then another piece came down and just last week another lot of concrete came down, and I have just left that on the steps. The concrete behind the zig zag at the top is not as solid as the wall at the bottom. The solid concrete walls have not been affected. In the corners where the wall abuts on to the side there are a few bits of stuff. I inspected the ground at the back. There was a trap which I wanted put outside but the plumber found a lot of roots. He pulled up some but there are a lot there now. In 1958 I got the position rectified by Mr. Davies. My drains then functioned temporarily, until September 1959, when I had further trouble. This time the trouble was worse, but similar to the first. There was damage to the wall, and leaking sewerage. Some was high up and some low down. I again had work done on the drains and again reported to my solicitor. My solicitor wrote a letter to Mr. Morgan dated 7th October 1959, and a reply was received to that letter. Nothing was done in regard to the trees. The contents of the first paragraph are untrue as I had had no trouble with the drains previous to my first complaint and I had not been told by the Public Trustee about defective drains. In para. 2. he said the trouble was there before he bought his property but I do not know. I have since enquired from the Public Trust Office. I don't know if Mr. Morgan has had my property examined by anyone. In the final paragraph he said it was a result of a party. I do not allow parties on my property. I stipulate that when I let the property as I do not like parties. I have never had it suggested to me that the damage was caused by something put in the drain by anybody on my side. I have now had to have the drains seen to about five or six times. May I say this - since these damages to the drains, the wall has become very deteriorated. I took the advice of the drainlayer as to what should be done on each occasion. Mr. Davies is a plumber and drainlayer. I eventually received advice that the drains would have to be renewed, and this work has been done. Before doing that I had further trouble when I again consulted my solicitors and on the 16th March they wrote a letter indicating what would be the cost of repairing the damage. I asked Mr. Morgan to

have the damage inspected and to put in any estimate if he wished, but I don't think he ever submitted any estimate or examined the property. That estimate in March 1960 - the work was done in accordance with that and I produce that estimate and the receipts for the work done. RECEIPT PUT IN AS EXHIBIT F. The work cost me £556 more. I gave the details of the cost of repairs to my solicitor. I know the total was about £850. Since then it has been pointed out that I can only have repairs done. I had further trouble with the drains in March 1960, when Mr. Davies had to come again. The trouble was similar to previous, but it was much worse. The trouble this time was all down the wall. Later on, I saw Mr. Morgan's man cutting the tops of the Pohutukawa trees and topping the other trees, and clearing Mr. Morgan's paths. Mr. Davies had to renew all the drains in 1960. I don't remember any further trouble after March 1960. It is suggested that I failed to abate the nuisance when I became aware of it. However, I have done all I possibly could. I consulted a plumber, the City Council and my solicitor. It is also suggested I failed to request the defendant to abate the nuisance. He had already had notice from you of the nuisance and a request, and there had been a reply from him indicating that the matter would have to be taken to Court. There is also a suggestion that I failed to take steps to reduce the damage - I could not take his trees out. I would not know how to do it, and have never had an invitation to do so. I was never invited to go on to his property to do anything about the trees. I myself can see no other cause for the deterioration in the walls.

COURT ADJOURNS 11.30 a.m.

COURT RESUMES 11.45 a.m.

RESPONDENT: You bought the property in October 1955? April 1955. Had CROSS - you been interested in the property for some time before you EXAMINED bought it? It was through my parents that I got it. Were BARTON you interested in it for some time before you bought it? Not COUNSEL very long. How long before did you first become interested in it? I didn't become interested in it as when it was advertised I just looked at it and bought it. What was it advertised for when you first saw the advert? Do I have to tell what I paid for it? Please answer my question. HIS HONOUR: How long after you saw the advert. did you buy it? It was my father who saw the advert. and we went to the Public Trustee together and bought it. COUNSEL. What was the price at which it was advertised? I can't remember now. What price did you purchase it for? £4,500. Do I take it that hardly any time elapsed at all between your seeing the advert. and your purchasing the property? No. Did you inspect the property? Not the outside. I only saw one crack in the wall. You actually paid a visit to the property? Yes. And walked up the steep path from Oriental Parade to the house? Yes. Notice how steep the wall was? No, I

didn't. You paid no attention at all to the wall except to see this crack? It was after I bought the property I saw the crack. So you didn't notice any cracks in the concrete walls at all before you purchased the property? No. Did you see any small exposed pipes running along the surface of the wall? Yes, I saw the small water pipes. And you saw that the concrete was not wholly round those pipes? Yes it was, because the pipes were on the top. There was some concrete round those pipes was there not? I can't remember. Notice that the concrete round the small water pipes was very cracked? I did not. Did you pay any attention to the concrete facing on the bank of each zig zag? No. Saw nothing there to give you concern? No. Did you inspect the property alone or with your father or whom? With my mother and family. I was more interested in the house. Did you enquire what Govt.Valuation was? No. And did you purchase the property at the price at which it was advertised, or do you recall buying at a lower price? I think we bought it at a lower price. After you purchased the property you made certain alterations to the interior of the house? That is right. The property was divided at the time you bought it into separate flats? No. But you made certain alterations to the house to divide it into flats? Yes. How many separate flats are there in the house now? Three. Your own portion and two flats? Yes. And each of these three portions has its own toilet facilities? That is right. Whereas previously there would be only one toilet facility for the whole house? That is right. In making these alterations it was necessary to make substantial changes to drainage in the house? Yes. And this would involve of course opening up the drains in the house would it not? Yes. You were aware about that? Only when I thought my drains were under the ground. What date did this alteration take place? I purchased in 1955 and it was carried out through 1955 and 1956. Who was the plumber that did this work, was it Mr.Davies? No, a Mr.Christiesen. Have any discussions with him about what you wanted in the way of drains? No. And you tell the Court that when Mr.Christiesen did this work you didn't know exactly where the drains on your property were? I swear before God I did not know my drains were in that concrete wall. Who was your solicitor when you purchased the property? Mr.Sievwright. Did you know that he had acted for the previous owner, Mrs.Livingstone? No. Did you have any discussion with him about the property you were buying? No. None at all? No. Did he indicate to you he was familiar with this property through his previous client? No. He said nothing about having previously written to Mr.Morgan complaining about the state of the drains? No. HIS HONOUR. Had Mrs.Livingstone then died? Yes. COUNSEL. Do you recall shortly after buying the property having a talk with Mr.Morgan at which you expressed your concern about the dilapidated state of your property? No, I talked to him about the trees. Are you able to give the date of this conversation accurately? No, but I think it

HIS HONOUR.
 COUNSEL.

was on a Saturday morning. Was there any discussion on that occasion about the state of the wall? No, except I said there was a crack in the wall and the trees might become dangerous and he said that had been there a long time. How old is the wall? I believe the house is about fifty years old and the carpenter told me it must be a good wall if it had lasted that long. Have you made in the course of preparation for trial enquiries about the age of the wall? No. Through your solicitors you concede it is not a very good wall? Oh yes it is. Know how old the trees are? No. Made enquiries about their age? No. You know Mr. Morgan's drains are closer to the trees than your drains? They must be, because I have seen him poking in his drains. His drains are closer to these trees than yours, aren't they? Yes. And the wall on his side of the property is closer to the trees than your wall? Yes. And so far as you know he has had no trouble with the structure of the drains or wall, has he? So far as I know. You have seen him you tell us poking a long thing like a plumber uses into his drains? Yes. Do you think he was engaging in periodic maintenance of the drains? That I could not tell you. I take it in the drains on your property there was no way of getting into them and poking this plumber's stick down the drains? I didn't see any means of doing that. You told us you didn't know where the drains were? That is right. In the course of your enquiries did you feel the lack of means for periodic maintenance was good or bad? I thought having the place converted to flats and they were new drains I did not worry. Did you feel the new drains went from the house to Oriental Parade? That is what I thought. When the flats were constructed in your house, were you under the impression the drains went the whole of the way from the flats to Oriental Parade? I thought they would go to the bottom of the steps. That is near Oriental Parade, about 10 yards? Yes. Did you think the plumber was putting in new pipes all the way to the bottom of the steps? I cannot tell you. All I say is that I imagined the drains were under the ground from the top of my house. You thought the plumber was putting in drains from the top to the bottom. Yes. Did you see any signs of work on the zig zag? No. How do you ordinarily get in and out of your property? Down the zig zag. You have described this wall as a dividing wall? Boundary wall. Is it not to a certain extent a retaining wall? There is no bank at the back of it. Of course as you didn't know where the drains were until 1958, you may not be able to answer this - isn't the function of that wall to act as a rest for the pipes that were laid on top of it from your house to the bottom of the pipe? I don't know, or whether the pipes just go straight across. They are iron pipes and they don't sag. I am not talking about the new pipes, I am talking about the old ones. You don't see the sewerage pipes. You know now that the original drains and stormwater pipes are embedded in concrete? Yes, in the wall. On top of the wall? No. They are in the top

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HIS HONOUR
COUNSEL

part. Yes. Over them there are thin water pipes? Yes. These thin pipes can be seen for quite some lengths? Yes. Also in between the thin water pipes there is a pipe which at one stage contained electrical wiring? HIS HONOUR. Is that an exposed pipe? I have not noted it. COUNSEL. Heard about it from any expert? No. Has your attention been drawn to a rusted pipe at the top of the wall? No, my attention has not been drawn to it but I recollect something of it. As plaintiff you would be fairly familiar with this wall? No, I left the drains to my plumber. Is not the position that the concrete about 18" from the top of the wall forms a block which was put on the wall afterwards? I do not know. The largest crack runs almost the whole length of the wall does it not? No, it does not, it is between the two paths to the house, the lower path, then the concrete steps and then the next path. The photos. indicate a long crack in some photos. running the whole length of the wall? The crack came after. HIS HONOUR. The long crack does appear, but where it finishes is not shown. It appears to start at or about one of these paths but it is perhaps difficult to say as it depends on the angle of the photo. COUNSEL. When you stand at the northern side of your property and look at the wall on the southern side it appears to be in a series of triangles? Yes. The top of the triangle coincides with path of zig zag? Yes. So height of wall will depend on each - reaching southern boundary? Yes. In between one path and the other are cracks? The big one you see on photo. was spread out with the roots. That is at the top of the zig zag steps and from there to the next path. How wide was the crack when you purchased the property? About one inch. How wide now? Dreadful. I suppose about 4 or 5 inches. It may be wider. Say six? I don't know, but it is pretty wide. How wide would you say it was? I would say 4 or 5 inches wide. You could get the palm of your hand in it? Yes, you could get two in it. And you can see in these cracks a root growth? Yes. Are you able to say how old you think that root growth is? No. Had enquiries made that have informed you about the age of the roots? No. Do I understand it is only in last six years that you have seen these roots? Yes. You have mentioned the occasion, I think it was on the morning when you were going to work on 4th August 1958 when you were walking down your path and saw the seepage. That was coming from towards the top of the wall but down near the bottom of the path? Yes. Fairly close to the garage? No, at the top of the steps. How far from Oriental Parade? You come up the path to the zig zag and then there are the zig zag steps, four lots of them, and on the top of those steps the seepage came from the wall on to the path and down. Would you be able to help me by indicating whether it was half way down the path or three-quarters of the way down? About half way. Was it close to any of the Pohutukawa trees? Yes. How many such trees are there? To my knowledge I think three, they are spread out, there may be more, and I can't tell you. Each

HIS HONOUR

COUNSEL

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HIS HONOUR
COUNSEL

tree has one trunk? I can't explain to you, it is best for you to see it yourself. Are you not able to tell us how many trees there are? I have never counted them. I should imagine there may be more than half a dozen all together. They are separate but they are bunched together. HIS HONOUR. They are in a clump are they? Yes. COUNSEL. There are no Pohutukawa trees on your property? Only one tree on the very top of the section behind the house. You have referred and your Counsel has referred to seedlings. I gather you refer to them by the photos. as appearing on the bank of the zig zag? Yes. What do you say, that they are root growths burst into leaf? Little trees growing from the seedlings of Mr.Morgan's Pohutukawas. That have been wafted over to your property and started to grow in the concrete? Yes, and they have started to grow in between the concrete and the garage. The seedlings can get into anything. The seedling went into the concrete and grew? Yes. There may have been a crack? Are you suggesting there may have been a crack on your property? Yes. Are you suggesting Mr.Morgan may have caused that? No. You can see yourself if you want to verify my statement that they are seedlings. I am asking the cause, do I understand you attribute the growth of the seedlings in the concrete facing to some act or omission on the part of Mr.Morgan? There can be a slight crack in the concrete and the seedlings spread it. A slight crack could be there for years and nothing happen to it. Is it not the true position with the wall also that it was the cracks that came first and the roots afterwards and not the roots first and the cracks afterwards? The roots came first. You are satisfied about that? Yes I am. Made enquiries to satisfy yourself? The roots of the trees were in the cracks. I am asking which came first? There was only one crack, so where did the other cracks come from. You had reports about the state of the drains in the drainage block, the top part of this wall where the old stormwater and sewerage pipes are? Only when I got in touch with the plumber. Were you told they were very old drains? No. Were you told anything about the construction of the drains? No. About the type of drains that they were, whether earthenware pipings? I was told that. Told about the way in which the pipes were fitted one into the other? No. You have mentioned the earlier litigation you had with Mr.Morgan. I want to get clear the two pieces of litigation you had in Magistrate's Court. The latest one I gathered from your solicitor was in respect of the present complaint about damage to the drains by Mr.Morgan's trees? No, it wasn't. The latest one in 1959 or 1960? Oh, yes. You instituted proceedings in the Magistrate's Court against Mr.Morgan? No, when I had litigation with him it was in 1957. You did issue proceedings in the Magistrate's Court for an injunction a short while before bringing the proceedings in this Court? Yes. When that was done did you have any communication with Mr.Morgan? No, I did not. He didn't speak to you about the

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proceedings? No. Know whether in fact the proceedings were served on him? I have not spoken to him since the earlier litigation. I want to come to that earlier litigation now, was one of the main issues in that earlier litigation the exact boundary between your property and his? Yes. Did you produce a plan in the Magistrate's Court in those proceedings? Yes. Was that plan prepared by Mr.Hannifey? Yes. Was that plan correct? Yes. Did you still believe it was correct? Yes. I have not cause to disbelieve it. At the foot of your property on the Oriental Parade level you have a building, a garage? Yes. You have recently extended that building? Yes. And installed in that building toilet facilities? Yes. That was done in connection with the new drainpipe put down from the house? No. Not done at the same time? No. Done by Mr.Davies? Yes. Any portion of his account for that work appear in the accounts you have submitted? No. Is that building exactly on the boundary between you and Mr.Morgan's property? I think it would be. Do you say that that building except for a wee bit of a garage is exactly on the true boundary between your property and Mr.Morgans's? Yes. When you were arranging for this building to be done did you again consult Mr.Hannifey? No. Who was instructed? Mr.Breedon. Did he have instructions to do this work on the boundary? Yes. Did he have access to Mr.Hannifey's plan? I could not say. In the Magistrate's Court did Mr.Morgan dispute the accuracy of Mr.Hannifey's plan? I don't remember that. Present when Mr.Morgan gave evidence? I was. Was there suggestion put to you or to Mr.Hannifey that the plan was not an accurate one? No. Down near the bottom of the property there is growth, Taupata growth? Yes, that shiny leaf. Yes, a dark green shiny leaf? Yes. Know on whose property that is growing? Mr.Morgan's. In accordance with Mr.Hannifey's plan on whose property is it growing? Mr.Morgan's. In your discussions with Mr.Morgan at the early stage to remove trees etc. did you mention about removing Taupata growth? No, only trees. Is it fair to assume his attention was limited to Pohutukawa trees? To all of his trees. Do you call Taupata a tree, that is what I am getting at? I would, yes. Is there some ivy growing on this wall too? On his side. Has it encroached into the cracks? No. You wouldn't call ivy a tree would you? A creeper, I think. Lest some of my questions may have been as pointed as they should have been, I ask again so there is no possibility of confusion, you bought the property for £4,500? Yes. You are absolutely sure of that? I am not quite sure. If you are not quite sure was there much difference one way or the other? No, it was only a little cheaper. What do you mean by that, £50 or £100? Yes. Are you sure? I can't say for certain as I can't remember the exact figure. Was it not £3,600? I don't know. It was done by the Public Trust and my father. Was it not £3,600? I can't say. What is latest Government Valuation? I can't remember. Does the price have much to do with this case. Answer my question, what is the latest valuation? I just

can't remember. Would it be £5,500? I just can't remember. Isn't the position that the £3,600 paid was substantially lower than the advertised price? I cannot remember. You can remember neither the exact price you paid nor the exact price it was advertised? I think the advert. was £4,000 something. We paid cash and got it a little cheaper. Was it not advertised at £4,250 and you got it for £3,600? I don't want to tell any lies, but I don't remember the price. I suggest to you that you got that reduction because of the state of the wall? No, it was not that. It was because we paid cash.

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RESPONDENT
RE-EXAMINED
KENT

The Pohutukawa which you speak of on your section behind your house, what depth is there? It is very long. Can you give any idea? It would be $2\frac{1}{2}$ times again the length of this court. (No.2 Court). You were asked some scientific questions about which came first, the seedlings or the roots, or the cracks, what is the thing you first noticed? I noticed the crack and the roots of the tree. In those early days did you notice any seedlings? No, that is just in recent years. You were asked about negotiations for the purchase of this property, whatever price you paid for it, were there any discussions between you and the Public Trustee that the price was reduced because of the condition of the wall? No. Was the wall discussed in any of those discussions? No.

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RESPONDENT
REPLIES TO
HIS HONOUR.

HIS HONOUR. Am I right in thinking it wasn't until after the purchase that you noticed the small crack at the top of the wall? Yes. Did you have a physical inspection of the property prior to purchasing it? No. Did you not go up to the house itself? Yes. In the daytime? Yes. On one or more occasions? When I went to have a look at the property and then after that. Before you bought did you go up and inspect on more than one occasion? Only once I went with my mother to look at the property. In the daytime? Yes. Noticed nothing about the wall at that time? No. Had the wall been in the condition in which it is now do you know whether you would have noticed it? Yes, I would. Do you then say from the time of your purchase in 1955 down to the present time the wall has got into the condition you speak of now? Yes. Did you pay any attention to the pipes on top of wall before purchasing? No. Did you have any occasions at any time before your solicitors wrote to discuss the pipes whether the outside pipes or concealed pipes with Mr.Morgan? No. When you purchased you put the matter in the hands of a contractor to alter it into three flats? Yes. Was it then decided to provide toilet facilities in each flat? Yes. And you knew at that stage which was in 1955 or 1956 that some alteration would have to be made to the existing drain? I only knew the drains were put in the ground and that is all I thought of. Did you not get a tender for the work that had to be done? Yes. Did that not include some charge in respect of the alteration of the drainage? I

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did not inspect the tender. He gave me a price for the drain. From the same man who made the alterations to the building? No, it was a plumber who did the plumbing and another man did the alterations. Did you have one man to do carpentering and you gave separate employment to the plumber? Yes. The plumber or drainlayer made a separate tender for the work? Yes. His job was to provide toilets for three flats where there had only been one before? Yes. Did you personally pay any attention to the manner in which he carried out that work? No. Do you know whether or not it involved opening up any portion of the wall? No. In front of the house it was opened up and that is all I saw. You say it wasn't until August 1958 that you knew that the wall contained the drains and sewerage? Yes. Then so far as you know did the alterations which you had carried out, the changeover to the three flats or installation of fresh toilets, did they involve any particular attention to this particular wall? No. It was shortly after you had been in that you had some conversation on the Saturday morning in regard to trees? Yes. Tell us approximately how many months after you were there? It was not very long after. Within a year? Yes. What in particular caused you to have the trouble? I was sweeping the path of the falling leaves. I saw Mr. Morgan and spoke to him about the trees. He said he was a tree lover and it was nature. What was your particular complaint? The leaves were falling on the path and I had to keep sweeping. It was the leaves and not any question of roots? Oh, no. It wasn't until Davies had done this work and roots were found in the drain that you approached your solicitors to write about the matter? Yes. Am I correct or incorrect in thinking it was on the same day you saw the roots in the drain that you consulted your solicitor? It may have been a couple of days after. You said you discovered this on 4th August. Solicitors wrote on 4th August? It must have been the same day. Do you say some of these trees are protruding through the wall on your side? Yes. From Mr. Morgan's property? Yes. When did you first see the trees protruding through the wall? After when the drains were blocked a branch was growing through the wall. About the time you engaged Mr. Davies? Maybe a bit earlier. That is why we had the photographs taken to show the trees growing through. It was a little time before they were taken I noticed. Was it not until some time last year that you first saw the trees growing through the wall? Yes. Are you able to say when you purchased the property there were trees growing through the wall? There were not. Would you have passed up and down the steps possibly daily? Yes. You noticed nothing until last year? No. So far as the protruding trees are concerned? No, that is right. Can you tell us whether the portion where the trees are protruding through is adjacent to the portion containing the sewerage pipes? Yes, where the pipes are they are just below. 5, 10 feet away or closer? Say about 6 to 8 inches down.

BREEDEN
WITNESS FOR
RESPONDENT

Calls TREVOR GRAHAM BREEDEN. I am a general contractor, residing in Berhampore. I know the property owned by the plaintiff at Oriental Parade. I first had cause to inspect that property after the plaintiff took it over. I went there to inspect it and to take a copper out and rebuild another. There were several jobs I have done since. When I first went to the premises I noticed first thing the crack down the wall. The house was bought in 1955, and shortly after I noticed the crack. Otherwise the walls were quite alright. I do concrete work. I have had no occasion to examine the wall closely. Each time I went back to do different work for the plaintiff I have noticed the wall getting worse on each occasion. I have not seen the wall during the past two or three months. When I last saw it there was a gap easily that wide, and the roots were just prising the wall apart. I have seen the roots coming through different places. The rest of the wall is alright. The length of the crack - I have never measured it, just looked at it, but it is easily the length of this Courtroom. That is the only serious crack I know of. That is the most particular one that I noticed. Apart from the roots in the wall, I did not really observe anything else. I could however see the roots starting to go through the pipes. All I really noticed is where the roots were lifting the wall. I was not asked to make a detailed inspection of the wall or anything like that. As to the concrete facing on the wall, when I first went to Mrs. Kyhats (A.1) that was in very good order and there were no breaks at all. That gradually got worse. As a matter of fact I noticed it between visits how it had broken away. That there has been done with a cement gun at some time or other. Apart from any foliage or growth, the original wall is quite solid. The roots that are going through have definitely lifted it. As to the concrete facing with the concrete gun, it is not a solid concrete facing. The same type of work was done outside the Mount Victoria tunnel and would last years. This was in quite good order when I saw it. As to the conversion of the garage, I put an extension on the old building and extended it. There are no Pohutukawa trees on the front of the plaintiff's section. I have really not noticed any, except from up the top. There are none anywhere near the main wall. As to the future of the wall, if the roots keep going as they are now, they must push the wall over. The more the roots keep growing the worse it will be and they will just push the wall over.

COURT ADJOURNS 12.55 p.m.

COURT RESUMES 2.15 p.m.

BREEDEN
CROSS -
EXAMINED
BARTON

On any of the occasions when you visited the property, did you have specific instructions to look at the concrete wall? None at all. So what you have told us today is the result of your incidental observations? Yes. As you walked up and down this path? Yes. But you have some experience yourself

of concrete work? That is true. And are you able to say whether the whole of this wall was laid at one and the same time or if portions were laid subsequently? The wall has been taken up so far and the drain taken up so far, the drain has been laid along that and then encased in concrete. That is as it appears to me. Have you observed any sign of bonding between second and first lot of concrete? I have not gone that far. I have noticed the trees in between keep lifting it all the time. Have you noticed any bonding? No. On top of the drains have been laid smaller water pipes? 10 Yes. Fresh concrete poured around them at some stage? I couldn't say. Have you observed any of the pipes on top of the wall with any particularity? No, all I have noticed is the break in the concrete. You say you have seen roots in these cracks? Yes. Formed any opinion about the age of the roots? No, not really. Have you seen any portion of this crack without roots in it at all? No, I haven't taken much notice. The main part I have noticed is where it is cluttered up with vines and roots. This large crack, the one you refer to as being the main crack, runs for a considerable distance 20 down the wall parallel to the top of the wall? Yes. From the fact that it is parallel to the wall do you with your knowledge of concrete work draw the inference that it has appeared where the second layer of concrete was poured on the first? Eventually there would be a crack there but that won't lift without something lifting it. Have you given any consideration to the approximate weight of this top portion of the concrete wall encasing the drainage system? No. Think it would run into several tons? Yes. This is a steep wall, 45 degrees? Pretty close to that? Round about that, yes. 30 Do you know anything about trees or tree roots? I have seen other types of walls with the same complaint. Even where there is a weight of several tons? Yes, by Athletic Park the front wall of a house is split open just with the tree roots growing. How old would you say this wall was? The house has been there 50 years so the wall would be that. You put the house older than 1910 wouldn't you? It is easily that all right. It would be older? I can't say to that. You are a general contractor? Yes. That includes carpentry? Jobbing carpentry. You are familiar with the age of houses? 40 Yes. Wouldn't you rather think the house was over 60 years old? No, not over that, I would say between 45 and 50. How old would you think the Pohutukawa trees were? Pretty old, I would say a fair while. The roots that are coming through the wall are pretty thick. Look to you to be pretty old? I haven't examined them. I haven't given any detail as to how old the roots are. You made an observation that looking at the roots you thought they would be old? Yes, from down below. You told us that if the wall remained in its present state the chances would be it would shortly break up? Not the 50 main wall itself. If the trees keep going it must come one way or the other. That is the top, which is a foot to eighteen inches? Yes. You regard that as unsubstantial? Yes. You wouldn't use that for fixing it? No. Do you know

where the cast iron pipes have been placed on the wall in recent weeks or months? No. If those pipes have been placed on the wall you regard as unsubstantial you would be very surprised? Yes, I am pretty sure they wouldn't be put up there. The concrete in the concrete wall varies in thickness does it not, thicker nearer the top than the back? Yes. Regard that as sound practice? The wall itself is very sound. You see no signs of roots getting through the bottom part of wall? No, only the top. Take any samples of the concrete at all? No. I think it was a cement gun you mentioned in respect of the walls along the path? One particular wall. You haven't made any close examination of that? Yes, and it appears that small vines have got behind it and cracked it. That is your deduction? Yes. Are you able to identify these small vines? No. You don't know whether they are Pohutukawas? No. You have seen what have been described as seedlings growing on that bank? Yes. From your knowledge of concrete work could a seedling grow on a concrete bank unless there was some crack for it to get into? There would have to be a crack for it to get into.

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BREEDEN
RE-EXAMINED
KENT

Is it not a - you were asked about cracks, is it usual to find cracks in concrete paths or walls without any apparent cause? Shrinkage could do that. Nine out of ten paths do crack once they have settled down. Providing, supposing, no vegetation gets into those cracks does it affect the wall or path? No, once it is cracked it is going to stay that way or move. If vegetation gets in there it will move. You were also asked something with regard to superstructure of the concrete placed upon the original concrete wall, would you expect a crack to develop there? Yes, it must come, will definitely come, for instance you will notice a big circle on every building that has gone up, a..... Anything sinister about that so far as the stability of the wall is concerned? No, nothing at all. When you first saw this wall with the crack in it was there anything there to suggest the stability was going to be affected? No, I saw it when I went round and from time to time noticed the wall getting wider. She drew my attention to small bits of concrete dropping down on the path as the wall moved. Apart from that action of those roots on the wall can you see any reason why the wall should not maintain its stability? No, that is the only cause I can see, the tree roots growing into the wall.

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HIS HONOUR

HIS HONOUR. What is your view of the future of the wall if nothing is done? So far as the main wall goes that would stand up alright, but the top part is broken. If it keeps on as it has for five or six years it must fall over one way or the other. It must fall into one property or the other. Can you tell us whether it may fall into one property what portion, the whole or what part? The part on top of the break. It is lifting as the vines are growing. It is

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getting to the stage where I am pretty sure it must come the plaintiff's way. So far as the main part of the wall itself is concerned, that is alright. Do you feel yourself competent to express any opinion as to what may happen to the sewerage drain? In my opinion it must break the drains, the lifting must break them. They are set in that concrete and they must lift with it.

DAVIES
WITNESS FOR
RESPONDENT

Calls EDWIN GEORGE DAVIES. I am a master plumber and drainlayer. I have been in business some thirty odd years. I know the property owned by the plaintiff on Oriental Parade. I had occasion to inspect that property, in particular the concrete wall. The drains are sited on a wall on the south boundary of the property which extends virtually all the way up. The wall originally was in two portions, first put in, the drain laid on the wall and then another block of concrete superimposed on the drain. HIS HONOUR. Do you mean a portion of the drain was laid on top of the wall and then encased in the concrete? Yes. Define the portion of the wall which you are dealing? The first six to eight feet is the base wall and the second portion would be more approx. 2 ft. on top of it encasing the drains. COUNSEL. I was first called on to make an inspection in 1958. I called to clear up a blocked drain which I did. It was blocked at that time by a few roots, nothing of consequence. We cleared it. That was the first time I have visited the premises. The stormwater drain is the lower pipe and the sewer pipe is the top one. The pipes were entirely encased in concrete. As a drainlayer, I regard that as a particularly satisfactory way of dealing with them. It was obviously quite a sound method of laying the drains. I had no occasion when inspecting the drains to break into the concrete. The first time there was evidence of roots that had broken out of the concrete and we did not have to open up the wall. They were in the side layer of the wall. In 1958 there were a few light roots around, there were a few cracks in the wall but not of any great consequence. I wasn't worried at that stage. We cleared them and I thought it was going to be alright. There was one crack where the top part superimposed on the lower portion of the wall. The only roots I saw there were small fibrous ones. There weren't any big ones. There were only cracks on the side. Some of the facing on the wall had come off. There wasn't very much concrete over the side, and after we put our drains in.... the concrete had been lifted off by the roots and there was a crack in the drain in one of the joints. There was a fibrous mass of roots but we put our rods through and cleared all those out. There are quite a lot of trees behind the concrete wall we are speaking of. I was again called to the site on several occasions. I can't give particular dates, but we were called back there not less than five times after 1958. It terminated on the last time we went because we could not do anything more. It was absolutely impregnated and

HIS HONOUR

COUNSEL

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you couldn't get a pencil through. The roots are still there. On the plaintiff's land there aren't any trees whatsoever. The only trees would be at the top of the section where there are no drains, a good 100 feet away from the wall. I made at least five visits to clear the drains. I eventually came to the conclusion that the drain was hopeless. It had started to disintegrate with the pressure of roots in the drain. They were growing bigger and the pipes expanding. I had occasion to make some excavations in the garage on the property. In making that excavation we found down in the garage that roots had gone from the wall outside and had gone down as far as I could see almost to the sewer which is situated in Oriental Parade. They are still there. We left a section in in case anyone wanted to see it. I would say that could be 50 ft. away. There are no other trees between the Pohutukawa trees and that site, other than a few Taupatas. Incidentally quite a few of the trees have been cut down since 1958. There aren't as many there now. I think the Taupatas have been cut down. I gave certain advice to the plaintiff, and I installed a new set of stormwater pipes and sewerage pipes. I have been paid for that job and the receipt produced is the one I gave her. As a drainlayer I have had experience of concrete. As to the value of the system of encasing drains, it is quite sound. It is carried out extensively where ground is difficult. It is the method adopted by the Council. The encasing is on the top of the existing wall. That is a sound practice and usual. The alternative - it was a very difficult job. By virtue of the paths to the house there are a series of Drains must go in a straight line. You can't have dips in them. To have a straight line with that type of terrain it would have to be very deep at certain points and very shallow at the others. Obviously it was necessary to build the wall up to take the pipes. In my inspection of the wall, which is not a retaining wall because there is another wall on the other side, I do not think it is a retaining wall and was carrying any unusual weight. I installed an outside drain from the top to the bottom which was fixed on timber which is bolted through to the concrete. We made provisions so that the timber can be removed if it needed substantial repairs. The alternative was that it would have cost probably another £500 and it would not have been such a good job. In any case the Council would not allow it. There is a danger of the concrete moving with the roots. The alternative would be - frankly I don't know how we could have done it any other way. I would not have done it any other way, anyway. Before we tackle any work, we inspect Council plans. I do not know when the plaintiff purchased this property, I believe certain work was done by another contractor. There is a record of that work with the Council. I have seen those records. The work did not in the least involve work on the drains. The alterations took part well away from the trouble spot, and they were

only minor alterations. It had nothing to do with the drain on the concrete wall. Another witness has been cross-examined about the property being converted into three flats, which meant the sewerage had to be installed for three instead of one. With regard to the capacity of the pipes, there is no significance at all. You could put 100 facet (pipes) off there and it would make no difference. Bigger pipes are not used. There is a tendency now to use smaller pipes. I have had no occasion to examine the work done by the previous contractor. In my knowledge there has been no trouble in that particular area. I don't think there was trouble with the drains, apart from trouble in 1952 according to Council records. I have had no experience of any trouble there. Mr. Morgan's drains are on the other side of the two boundary walls, in the vicinity of where the trees are growing. I have not seen any damage to his drains but frankly I would be surprised if he has not a lot of trouble. I have never inspected his drains. I have examined the southern wall which is in an extremely bad condition. The wall has lifted very very badly, that is the top portion of the wall. The base section seems reasonable. I can't say I have noticed anything in the base that wasn't there before. I have noticed certain cracks there but wouldn't be unduly worried about them. If roots had not gone through any cracks in the wall, I find no reason to think the drain and wall would not have been satisfactory. I can see no other reason than the roots for the damage that has been caused. I have also observed the walls at the back of the zig zag path. There has been a marked deterioration over the last three years in that wall. When we first went there I am quite sure they were reasonable, but there are a few pieces of concrete off there now.

DAVIES
CROSS -
EXAMINED
BARTON

Are you able to assist us with the age of the wall? All I can say is the wall obviously was put in at the same time as the house. Was the drainage pipe which rested on the wall put in at the same time as the wall or afterwards? I would say together. There would be two different layings of concrete? Yes. And on top of the two pipes, the stormwater drain and sewage drain there are other pipes? Yes, I think there is also an old electric cable and also two water pipes. Have they been placed there after the stormwater and sewage drains? Yes. So a further layer of concrete was put over them? No, they were covered with casing concrete. You have noticed the pipe containing electrical wiring, it appears to be rather rusty? Yes. Rust would have a marked effect on the concrete? No. You mentioned in your view the construction used was a sound construction? Yes. What type of joint did the various drain pipes have? Cement joints. Same as mortar? No, mortar is sand mixture, this was concrete. Regard that as perfectly watertight? Yes. Is that the method used nowadays? Yes. Is it not the practice to use water-tight rubber rings? Yes, that came in over

the last few years. From your observation of the drains, was any provision made for contraction or expansion of the pipes? No. You accept pipes do expand and contract due to change in the weather? No, but not sufficient to break the joints. This is a very long drainage pipe? Yes. In your estimate how long would it be from top of section to Oriental Parade? 235 ft. (225 ft). So this drainage block is a long one? Yes. Wouldn't describe it as flexible in any way? No, perfectly rigid. And Wellington being what it is for earthquakes, any comment to make on their effect on this type of construction? It is the accepted method and haven't had trouble. Is setting pipes in concrete the same as laying them on concrete and pouring concrete on them? The same. When you opened the drain pipes up you say you saw certain cracks in the pipes, are you able to say what the age of those cracks would be? No, I don't know, but I don't think they were terribly old. Can you assist to this extent, could I ask you the year when you made the discovery about the cracks in the pipe? 1958. Late year when you saw the cracks? Yes. Would the cracks be older than 4 years? If they had been older the drains would have been leaking and would have been causing a nuisance. You mentioned that the pipes were on some occasion very filled with roots, so much so you said you couldn't get a pencil through it? That was the last visit we made. Were these roots a tangled mass? It was a tangled mass of fibrous roots, plus very very large ones. You mentioned the discovery of masses of roots at the garage, was that in connection with installing toilet facilities? We - there was a separate contract there. We put a lavatory and basin in there roughly a year before. We struck some fibrous stuff there, not a great deal. We came across the extremely bad roots when we started the new contract. These roots were down both the stormwater and sewage pipes. That was quite a distance from the trees? Yes. Were those roots tangled or thick? A year ago we made a cut and there were fibrous roots there. The other roots were up towards the Pohutukawa trees. On the occasions when you visited the property you have obviously taken very detailed attention of this wall? Yes, I was concerned with it. You observed this substantial crack running parallel with the top? Yes. That coincides with the top of the original concrete on which the pipes were laid? Yes. And you have seen roots in that crack? Very very large roots there. Have you seen substantial lengths in that crack with no roots at all? Say a length of a foot or so? No, I don't think so. Do these roots fill up the crack completely or just rest on it? The crack is very small before the roots get in there then of course the roots grow and will lift the concrete up. Do I take it in your view the roots fill up the whole space, you can't take up a root and wobble it about? Oh, no, the roots are too strong and are held tight by the concrete. Have you noticed that on this wall somebody has made decorative lines to indicate squares? I don't remember that. I don't know anything about

those and can't recall having observed them. In the photo you are looking at (A.4) you will see a mark against the wall of an indentation where at some stage or other there was presumably a wooden post? Yes. You will see where that post goes from the ground up through this main crack and a portion in the other drainage block? Yes. Do you observe that the line of the indentation where that wooden post was is itself broken? Yes. And the top portion which is the indentation in the concrete block seems to have moved downhill a small distance? Yes. Do you attribute that movement downhill to the roots? I would say yes. Why? The roots have lifted it and obviously that weight would take it downhill. The sequence of events you place on your interpretation is roots lifting concrete block, concrete block through its own weight moving downhill? Yes. May I put the alternative, the drainage block through its weight lifted and moved downhill causing this parallel crack into which the roots then came? I doubt it. The concrete would be rough, and that roughness would stop any downhill movement. The alternative interpretation I gave is not inconsistent with any of the facts that you have been able to observe is it? That is my opinion about the movement of the wall. Would you be prepared to agree that the fact that the crack is parallel rather supports the interpretation which I suggest than yours? It is a theory, but not a strong one. Could I give a further suggestion, I want you as a person with expert knowledge to consider this - the drainage block was laid upon the wall and its great weight caused it to buckle slightly. This movement caused cracks to appear in the concrete joints of the pipes and the moisture which came through those cracks attracted Pohutukawa roots. I don't agree with that. Have you ever heard of Pohutukawa roots getting into a wall without a crack being there first? I can't say a Pohutukawa but I have seen other roots. Is it possible for roots to get into a pipe or through the concrete joint between two pipes without there first being a crack? Not really. Is it not then a deduction which can be reasonably made that it is the crack which comes first and the penetration of these roots etc. following? Yes, inasmuch as this - all drains have cracks in the joints. Roots go searching for water. They are minute threadlike roots and they would go in in search of water through a minute crack in the concrete joint and that would gradually open up. You have mentioned the fact that you are aware the pipes of the defendant's property run down very close to the drainage block on the plaintiff's property? Yes. His drainage and wall are closer to the Pohutukawas? Yes. I think you said you would be very surprised if Mr.Morgan had no trouble with his pipes? Yes. I would like you to assume he has had no trouble with his pipes, would that lead you to alter your opinion as to the cause of the trouble with the plaintiff's pipes? No, not at all. Do you know it is possible for Mr.Morgan to make examinations and do periodic maintenance in his pipes by putting one of your instruments down the pipe?

It is possible for him to do it but it is illegal. The fact remains that it is something that can be done? Yes. That can't or couldn't be done with plaintiff's drainage block? You had to open the concrete? It was already opened by the roots. But the concrete had to be removed first? Yes. Periodic maintenance was not possible in her property until the concrete was moved? We had no trouble in doing maintenance as we had the hole. That was after the concrete was moved? Yes. Is it sound practice to have such a long stretch of drainage without facilities of making periodic inspections? 10
 No, the modern idea is to have inlets for inspection every 30 ft. You have done that of course with the pipes you have placed in? Yes. You mentioned the concrete plaster or cement plaster on the backs/cracks as you move up the path, you say some movement there had been significant in the past three years? Yes. The cause of that is not a matter that falls within your special competence as a plumber or drainlayer? No.

COURT ADJOURNS 3.30 p.m.

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COURT RESUMES 3.40 p.m.

DAVIES
 RE-EXAMINED
 KENT.

My friend put certain questions to you regarding the pipes being encased, is that accepted as a good practice even to-day? Yes. Can you give any idea of the original plumbing? I can only say some years. Something was said regarding expansion and contraction of the pipes, if there was anything in that, would you expect it to manifest itself under ten, fifty years? It would have shown itself up before 30
 now. You say any connection would have a small fissure in it, once the break commences, however caused, what have you to say with regard to future prospects of the plumbing if something is not done? I wouldn't worry about the cracking. Most drainage has small fissures. If a spider root goes in that causes damage? Yes. Something was said about an alternative, that when top section of concrete is laid on the lower section there is likely to be some slip downhill, first, do you know anything about arresting this? In modern practice you put rods in concrete to stop that. I am quite 40
 sure the bottom wall was left very rough to get a natural key. You wouldn't have it smooth because obviously it would shoot off. It also obviously wouldn't last all that time. Once the initial root gets in, whether in drain or concrete wall, what have you to say about the potential danger? It feeds on water and as it feeds gets bigger and opens up the crack. Would the movement you envisage, the levering by the roots, have any effect on the pipes themselves? Yes, it is putting pressure on them and could cause slight subsidence down and the roots would get in. 50

HIS HONOUR

HIS HONOUR. I understand that you were called in to see this wall and the pipes in or about 1958? Yes. And you say you have been there some five times since? Yes. On

the first occasion you saw signs of roots growing out of the side wall? Yes. You are not able to tell us whether on that occasion the roots had penetrated into the drains? A few fibrous growths had entered in, but not to a great extent. It wasn't until the second occasion when you opened up the drain? We opened it up on the first occasion, or put rods through. When did you put new pipes in? Nine months ago. Do I gather that from 1958 to approximately some time in 1960 you were dealing or attempting to deal with the stormwater drains as they were when you first came on to the property? 10

Yes. You say if these drains become blocked with roots and the roots feed on the water in the drains, the inevitable process is that the drains become cracked and useless, is that right? Yes. I want to know whether your theory is that the beginning of the process in this instance is the pressure on the outside wall of the roots from trees? That is so. That is the beginning of the process? Yes, if there had been no roots there would have been no trouble. The roots press against the wall causing cracks? Yes. The roots get into the cracks, expand, and further push their way into the stormwater drains by causing cracks in the drains? 20

Yes. Would your theory be affected if it were the fact that a concrete wall more proximate to the trees was not similarly affected by that process? Not necessarily. The roots will always go to water. There wasn't a drain in that concrete wall and they wouldn't have anything to do with that wall. I have seen roots go under a house to the other side to a drain. Your theory is the roots growing from the trees would have a tendency to bypass the first wall because there was no water in the first wall? They went under and over the top. They came in between the two walls too. In search of water which the wall in question here provided? Yes. You say when you were doing work on the garage these roots extended actually from the trees to the garage? Yes, they are there at present too. In fact the roots had extended to a much greater length than the distance between the trees and the wall? Yes. Have you yourself had experience of any similar process of roots in search of water bypassing something else they cracked? Yes, frequently bypass stormwater drains and go for sewerage drains, as sewerage drains are used all the time and the others may be dry. Between August 1958 and some time in 1960 you cleared out the drains on several occasions? Yes. Did you find the roots in the drains on each occasion or only some occasions? Yes, the roots became progressively worse. They got to the stage when we couldn't penetrate the drains. They completely blocked the drain. Was it ultimately at that stage that you decided to put in other drains? Yes, I told the plaintiff I could do no more. Having decided that what sort of drain did you put in? Cast iron drains on the side of the wall. I understood owing to some Council regulation it would not be possible or advisable to put the similar type of drains in the wall? I referred to the Council before doing it and it was done with their approval. 50

It was decided to put cast iron drains in the wall the cost would have been much greater? Yes, and there was nothing to gain by putting them inside the wall. This is a modern method of doing drains. They are easier to lay too as they can be laid quickly. What do you say now as to possibility of cast iron drains where they are being affected by these roots? They won't be affected. They are corked in. Would it be right to say that insofar as there is any complaint about the possible or further breaking of the drain the source of that complaint has now been removed? Oh, quite. How-10 ever, would the process still continue of the roots in your opinion seeking cracks in this wall? The roots will now keep on growing. In my opinion the top wall is going to become hazardous as it will be tilting one way or the other. Have you been engaged yourself in what one might call wall construction work? Yes. I have done very extensive wall construction work on my own property. Would you consider it necessary to rebuild the wall wholly or in part or could the matter be repaired in some way and prevented other than rebuilding the wall? The bottom wall is reasonable but the 20 top portion would have to be demolished, that is the top two feet. That is not of course where you have got the drains? No, the drains are just below that top portion. We have some beams there. If you removed your top portion would you put anything in its place? Yes, perhaps bricked up or extended. For what purpose? I have an idea, but I am not sure, but I think the wall next door covers all that earth. I think some of that earth would come in. I take it in the hesitancy of your reply that you have not given attention to this particular matter? I have not worried about.30 That is only my own observation. I suppose the wall may go on for some years without giving trouble? Not the top as I have noticed a marked deterioration over the past three years.

MR.BARTON

MR.BARTON. In discussing the original cause I gathered from your answer to His Honour that you thought it was the pressure of the roots on the wall which caused the first cracks? Not exactly, you will always get cracks in concrete especially if you have successive layers. These cracks will come fairly soon after the structure is put up? Yes. This 40 structure would be contemporaneous with the house? Yes. So the original cracks would have been there 40, 45 or may be 50 years ago? Yes. These trees are fairly old are they not? I am not a botanist. They seem to you as a layman to be very old? I have seen them for five or six years. You don't say they are only ten years old? I am not competent to answer. They may be 5 or 25 years old. If contemporaneous with the wall or a bit older would you not have thought the trouble would have happened many years ago? These trees are only baby Pohutukawas as compared with those at Courtenay Place. 50 Assuming they are contemporaneous with the wall or somewhat older would you not have expected their roots to have got into the wall years ago if your theory is the correct one? Assuming they are the same age as the wall, yes. Then again

in answer to a question you mentioned you had experience of roots passing a stormwater drain and going for a sewage drain and you described that as a similar type of situation as the one occurring here? Yes. You are aware Mr. Morgan's sewage drain goes down the boundary? I was but I am not aware that he has not had trouble. Assume he has not had trouble, do you express any view about the fact that roots have bypassed his sewage drain and got into Mrs. Khyatt's drain? Frankly I am amazed with my experience of drains that he has not had trouble.

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ORCHESTON
WITNESS FOR
RESPONDENT

Calls BRUCE ELWIN ORCHESTON. I am a qualified architect. I was with the hydro electrical branch as assistant engineer for some years. My firm carry on business as engineers. I have had reason to inspect the property of the plaintiff. In particular, I was asked to make an inspection of the concrete wall on the south boundary of the property. I was also asked to examine the drains embedded in that wall, and to examine the trees and foliage growing on the adjoining property. So far as the concrete wall is concerned, by a comparison of the houses in the near vicinity I would think it was erected in 1910. In my view the wall may be a retaining wall. It is a concrete wall in solid block, and I have some doubt as to whether it was a retaining wall. I think the concrete work visible has been a surround to the drains coming down the slip as it is a rather difficult position for drains to be. They appear to have been surrounded by concrete as part of the top of the wall and they are reinforced by a type of cable which is used for reinforcing. The wall would have been a perfectly sound one if it had not been for the roots. For those days, I regard the wall as a first-class one, but to-day it would not be so good. As to the drains, I measured the drains and supplied a sketch. The wall is approximately so wide and so high (demonstrates). (Permitted to refer to sketch). It is near fourteen inches wide (the wall) and perhaps eighteen inches high, in which the drains are embedded. I have prepared a sketch plan showing the approximate position of the boundary wall and a cross section showing the position of the various pipes, which I now produce (EXHIBIT G.) Starting with the top right one, that is a view of the wall looking south from the zig zag path. That is a cross-section indicating the superstructure on a larger scale and the various pipes. The crack referred to in the cross-section - there is another part of concrete omitted from the plan. I think the pipes have at some stage been repaired and there is a pattern on the wall too, but I don't think there is any significance in that. The top portion could have been added to or underpinned. It is my opinion that the drains and the top part of the wall was built first, and the bottom part has been put in second, and put in when the concrete steps, paths and ramps were put in. That is only my opinion, but I think that is what happened. I think there was concrete work surrounding the pipes first, and then the concrete wall was

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put under afterwards. It is all in solid rock. I examined the drains inside the wall and other than the damage caused by the roots - the broken portions of the drains were caused by the expansion of the roots. They had exploded by the presence of the roots in them. From my inspection I could see no other reason for the damage. They were perfectly satisfactory and stable if the roots had not pushed them one way or another, fracturing the pipes and admitting the roots to go through and expand. The pipes were full of roots as big as your fingers. In the large part some of the roots were as thick 10 as your wrist. In my experience of these matters roots when they get to water grow with speed. Regarding the damage to the drains, I think the tendency has been for the bole of the tree to grow and its root portion with it and it has pushed the top portion of the wall into the plaintiff's property. Thereupon the expanding crack in the wall had been pushing the top of the wall upwards and outwards. That would fracture the pipes. It would not be long before the roots are in the drains and once in would make the drains unserviceable. The trees are leaning away from the plaintiff's property on account 20 of the prevailing northerly wind. When I saw them they were rather small. The trunks were perhaps 6 ins. in part thick, and I judged the trees to have been grown about 1920. I have grown thousands of them and know a lot about them. Pohutukawas are peculiar trees and have roots which hang down about 6 ft. from the tree. They come down in humid weather and grow into the ground, and it is these ariel roots that boatmen seek to use for bows of boats. It is a well known fact a tree sends roots out ariely to any place they can find moisture. In Auckland they grow on cliffs round the harbour and if 30 a piece comes away you just see a mass of roots. Eventually there is a slip with the roots pushing a house and a slip away. The ariel roots come from the branches of the tree. They are visible to the eye. They start off like cottom. One will grow bigger than others. Others might dry up. The roots once they get away if after moisture go a long way. I would think they would go further than the extent of their branch structure. The roots in the pipes are both ariel roots and ordinary roots. Roots grown in the ground come up to the surface and become a mat round the bole of the tree, and the ariel ones go down. There would be a mixture 40 of both. Personally I think the earth roots are the trouble in this instance as it is rather too exposed for air roots to attach themselves to anything. They require the stillness of the forest. I have observed the wall in general. The base of the wall is a lot thinner than the portion visible at the top. Parts of it are being pushed away from the structure by the roots. If it had not been for the roots the wall would be sound and stable. As a result of the roots there are a large number of cracks in the wall and roots and young trees (quite valuable trees too) are in 50 the cracks. I have noticed seedlings which have been blown about by the wind on the property. After a seedling has developed, it takes a fair time for them to grow to a size

which would cause trouble, but they are notorious for causing trouble. In fact that is the reason why they are going to cut them down at Courtenay Place. Assuming the top section of the wall came first, the placing of the other portion would not have a tendency to slip. They would build the bottom wall in steps. Any drainlayer putting in those drains initially would take steps to see the concrete was stable. Regarding a suggestion that the wall itself was unstable, that is a point I make. I doubt if it could collapse as it is in solid rock. It is very solid Wellington rock and it is quite obvious the roots have caused this trouble. I have inspected the top of the wall, which is only faced. Without the intrusion of seedlings etc., the paths are cut into solid ground and it is still relatively sound. Where the paths are soft, it has been filled in with wire netting and then concrete, and those are defective. I don't think root trouble caused that but from seedlings there would be trouble. As to the photographs, (EXHIBIT A.) the trees have developed since I was there. As to the concrete facing collapsing, the preponderance of growth in these wall but the weed would not affect that. As a man of experience in these matters, I can give other hypothesis why the damage was caused. There is no doubt in my mind that the trouble has been caused by the roots. There is a suggestion Mr. Morgan has not had trouble with his drains, but they are newer drains. There are a lot more reasons for that. The appearance of the concrete shows that the wall is only half the age of the plaintiff's wall. You can get reference as to when the drains were laid from the Council. If the trees stay where they are I would say he is likely to have the same trouble. The trees have now grown to a stage where their trunks and branches have considerable strength.

HIS HONOUR

HIS HONOUR. I take it your evidence is that this wall has been detrimentally affected by the growing roots and will continue to be detrimentally affected? Yes. If for instance the trees were removed, would that create a cessation of the trouble or would you have to remove the roots as well? There would be suckers from the roots and they would have to be removed. Roots have suckers too do they? Yes. Do you mean by that if the trees were removed the roots would still expand and grow and increase? I think there are chemicals which can be sprayed on them to kill them, if not on the first application then after several applications. In the absence of the trees the roots would not have the same destructive effect? No. The roots would have less destruction if sprayed? That is right. It would be a particularly expensive job to remove roots that had grown for 25 yards or so? Yes.

MR. KENT

MR. KENT. I made an estimate as to what I thought would be the cost of repairing the wall. For renewing the retaining wall, I don't think renewing it is necessary. I recommended when the trees were removed and the roots impotent, that

the walls be prepared by a plasterer at an estimated cost of £170.

COURT ADJOURNS 4.35 p.m.

COURT RESUMES 10.30 a.m.

ORCHESTON
CROSS
EXAMINED
BARTON

I would like to ask some questions about your theory that it was the wall at the base that was put in after the drainage system. You recall you suggested that yesterday? Yes. 10
Did you mean by that that the pipes were fitted from the top to the bottom with concrete around them and then the underpinning? Or that the pipes were there suspended in the air and then the underpinning? No, my opinion was when house built drains put in and because terrain so difficult the trench was cut and drains installed in concrete and the pipes are still evident. At some time later the owner arranged for steps, walls, facing to be done. So when the pipes were put in the concrete block that concrete would be resting on earth or rock? Yes. If that were the method 20
used it would be extraordinarily difficult to have a firm joint between the underpinning concrete and the top? It is known as underpinning, and is used on second-storey buildings in the City. It can be done in sections. What about providing what some witnesses call a key in the concrete below so that the concrete above is firmly in place and doesn't move? The original concrete above would have its key in the rock. You are familiar with the two main drains in the concrete block, stormwater and sewage? The stormwater one is difficult to see but it must be there. You have seen 30
the sewage drain? Yes. You know the material used to join one pipe to another? Yes. Is that concrete or mortar? Usually one of three, now it is mortar. In those days when the drain was laid it would have been mortar. Would not such a drainage block be a rigid structure? Yes, that is its purpose, encasing the pipes in concrete for the rigidity. Is it not true that there is a certain amount of expansion and contraction through weather conditions? Concrete contracts about each 8 ft. There is no structural significance in that. Cracks are more likely to appear if you had a rigid 40
structure? Structurally I don't understand that. If there is provision for contraction and expansion these cracks are less likely to appear? The present day tendency is to provide expansion against cracks. I am not asking about good practice at the time I am asking about the method used. Concrete does expand about every 8 ft. so it is wise. Not only is the concrete cracked but also some of the pipes in this case, did you observe that? Obviously. Are you able to say how old those cracks in the pipes would be? They would occur when the concrete cracked. That would crack shortly 50
after it was put in place? Yes. So that is a very long time ago now? Perhaps a few years ago. Through those cracks would come very small quantities of moisture? That is problematical. A small amount is of no consequence. If

you have cracks in drain pipes a small amount of moisture would come out? It would initially but the amount of calcine in the water would close it up in time. Does the material that was used in joining one pipe to another also liable to crack? If the pipes were not encased in concrete that is where the cracks would be. In my opinion the pipes would crack where the concrete cracks. This is a very long drainage block isn't it running from the top down to the bottom? Yes, but there are others equally as long. It would be very heavy, run into some tons? Yes. Are you able to give some rough estimate of weight? No. You do agree it would run into some tons? Yes. If there was no provision for expansion and contraction, what would be the effect of earthquake upon such a structure? The earthquake that Wellington has from time to time? The drainage lining would probably crack in much the same way as it would under normal shrinkage. Those cracks would also provide an opportunity for some moisture to get out? A little, but also for roots to get in. Would roots go where there was no moisture? A certain amount do. Would roots go into cracks where there is no moisture? I can't conceive of a crack where there wouldn't be roots as the crack would hold moisture and the roots would follow. Here we are dealing with a crack in a pipe and the moisture is inside the pipe, is it not rather the force of gravity rather than capillary action that would bring moisture to bottom of drainage system? The drains are laid to take the moisture away. Once you have cracks in pipes does it not follow if moisture in pipes the moisture will get out in small quantities through the cracks? Yes, in small quantities. Because the moisture was coming out the roots would be attracted? If they are present. Do I understand that your interpretation of what you have seen on the property is that the Pohutukawa trees either through the enlarging of the trunk or bole or through the protrusion of the roots has forced the drainage system into the defendant's property? The movement is rather more upwards. The pressure of the roots has raised the drain. Have you made a close examination of the main crack under the drainage block? Yes. Have you observed that the concrete drainage block in some parts is outside the bottom part of the wall into Morgan's property and that in other parts it is on the plaintiff's side? Yes. Taking a birds eye view would indicate the wall was bending in a serpentine manner? Either the wall or drainage or both, yes. Is not that consistent with the suggestion I put that the weight of the drainage block pressing down on the bottom being perfectly rigid at some stage or other began slightly to buckle? No, I don't agree. A reinforced concrete building has a column seven storeys high and there is no chance of it buckling. You say it is all reinforced? In those days they were not reinforced very efficiently. Is it reinforced? It seems to have been reinforced with very old pipes. They run parallel with the drains. Do you regard those pipes in the nature of reinforcing? There are so

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many that they would hardly be replacements. Look at EXHIBIT G. (Sketch plan), that is your own plan is it not? Yes. I refer you to the drawing on the bottom right, you see embedded in the concrete two pipes which you describe as two old pipes and a black dot which you describe as an electric cable, is that what you are referring to as reinforcement? It is hard to take myself back fifty years and say whether they are disused or old pipes. I looked again this morning and it is a tangle. There are more pipes than I have on here. Is it not the position that at some stage after the concrete block was put there surrounding the two drains some pipes were laid on top and concrete encased them? Yes, there is evidence of that. And is that not the true interpretation of the two old pipes referred to in the sketch? Yes, it could be. It is possible to see long splinters of concrete resting between the two old pipes? Yes. I also think the actual piece of concrete has been put on top to make good drainage repairs. Again looking at your diagram you have hard up against plaintiff's wall another wall somewhat lower down in Morgan's property? I don't think it is a wall, it is a concrete surround for his drain. Did you form any impression of the age of that concrete? Yes, it is newer concrete than this concrete. How old do you think the plaintiff's concrete is? I think the concrete and drains were put there when the house was built. When do you think the house was built? 1910. What would you say if it was suggested the house was built in 1880? I would be surprised. If it were would you think this concrete was put there then? No. Your view is that the concrete was put there 40 or 50 years ago? Yes, that is when the cement was first available here. And the concrete surrounding Morgan's pipes is more recent, can you give an estimate? Only by method of reconstruction, as it has been cast against the plaintiff's wall. Within the last six years? No, it is older than that. In your plan, I don't know whether this is deliberate or not, but again looking at diagram bottom right, you have the position of the main cracks of varying widths containing considerable roots running right through Mrs. Khyatt's wall under the concrete drainage block. On your diagram it appears to stop when it reaches Mr. Morgan's? That is quite insignificant as I could equally as well have shown it on his. Would you? I did not make an examination. Coming round to Mr. Morgan's property did you see any signs of a crack? His earth is a little higher and there is not as much concrete work. Is this pure hypothesis that the crack runs through to Mr. Morgan's side? I drew it from her side of the property and looked over the fence but I have not been over on his property at all. If there is no crack corresponding to the crack on Mrs. Khyatt's side of the property to be seen in Mr. Morgan's side, does that not lead you to believe that there is something special about the wall on Mrs. Khyatt's property? In what way? It was something to do with the structure of the wall on her property? If anything I think her wall

is a more robust one. Would you expect her wall not to have such a crack but for his to have it? I think his wall is a much more recent wall and is not a wall at all. Seeing it is not a wall at all it is not as substantial as hers? That is right. Wouldn't it be easier for Pohutukawa roots to cause cracks in the concrete on Mr.Morgan's side of the property than on her side? I think there will be cracks there. I am asking wouldn't it be easier for those trees to cause cracks on his side than on hers? This concrete is so new that the roots would already be in her property. You would say that would be more than six years ago? The trees are more than 40 years old in my opinion. You know something about those trees? I have studied tens of thousands of them. Petone foreshore, Massey Memorial etc. With that knowledge do you say the root system would have been surrounding her drainage block and into the pipes before Mr.Morgan's concrete was laid? I can't be that sure. If he is not having trouble with his drains then those drains are obviously new. Personally I can't see how he is not having trouble as the roots on his property are three-quarters of an inch in diameter this morning. Are you familiar with the rate of growth of Pohutukawa roots? Yes. Fairly quick where there is ample moisture? Yes. Are you able to judge age of roots by their appearance and size? It is difficult, but if the conditions are good they will grow rapidly like a mat. I was in fact this morning amazed how much the trees had grown since I was on the site a year ago. Those trees had been there you say 40 years? Yes. In the early years the roots grow very slowly. When 6 years old it is only so high (a foot to 18 ins). and grow about a quarter inch in first year, an inch in second year and so on, and in six years they are about 1½ ft. After the six year period they grow much more rapidly. HIS HONOUR. You suggest they grow an inch or so a year? In its early years, but later 2 ft. a year. COUNSEL. When did you first examine the property? 13 months ago. Any roots visible when you made that examination? Yes. Thick roots and air roots? Yes. With your knowledge of that tree, would you think those roots were less than six years old? The roots are 40 years old. But not in the position in which you saw them? No, some have grown since a year ago and seem to have grown into the bottom garage 40 ft. away. They were not there 13 months ago. If you were told that in 1955 there was only a very small crack visible along this wall on the plaintiff's property, and that no roots were visible, what would your comment be? I think there must have been roots visible five years ago, the cracks though might well have been smaller. PLAN TO BE PRODUCED LATER BY DEFENDANT PUT IN. (PLAN PREPARED BY MR.GANDAR AND NUMBERED EXHIBIT 1). You see at the top of the plan, I wonder whether you would be good enough to make any comment? The longitudinal section? That is an elevation of the south wall. Would you be kind enough to look at the various comments made on the longitudinal section "This wall is" I see those, and I agree

HIS HONOUR
COUNSEL

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with that. The notes on the plan correctly describe the wall. Look at the diagram, the enlargement which has got on it the lines indicating the decorative joints and the imprint of a wooden post, would you look at the measurements of the movement, do you agree with that? Yes, the roots have lifted the structure to the white line in the diagram. The crack should have been shown full of roots. You have got 3" gap containing roots on the other plan? Yes, the roots caused the trouble and lifted the drain. The ground is solid rock and the roots got into the crack and lifted it to the extent of three inches. I gathered your interpretation was the roots caused the crack? The roots caused the crack. 10
 There is no argument the roots pushed the wall out. There are no two ways about it. There would be no doubt about that. No tree or no crack. You say the roots caused the crack? Yes. Not a crack before the roots? No, merely a join. This diagram shows a movement downhill? Yes, that would come after the crack was formed. The principle movement is outwards. The pipes are pushed up and out. Do you know whether the point indicated on plan, the block is pushed out? It is pushed out and sideways. It can't go downwards as it is on solid rock. Are they pushed to the plaintiff's property or to Morgan's property? Principally to the harbour. The weight of this is a very light load on rock compared to a large city building and it is obvious it has been pushed out by the roots. The ground has not been depressed by the weight. That is simple arithmetic. Have you ever heard of roots getting into perfectly good concrete? Yes, even solid concrete walls will have ivy on it. In the end it will deteriorate beyond repair. Ever heard of Pohutukawas getting into solid concrete? No, but if there is sufficient moisture on the other side of the wall the roots would grow and spread and instead of being round would be long fibrous roots and would get into shrinkage joints. Ever heard of Pohutukawa getting into concrete otherwise than through a crack? No, but I have never heard of concrete without a crack. In conclusion I want to put this to you for your comments, do you know a Mr. Morrison, W.G. Morrison, Civil Engineer? Yes. Familiar with his qualifications? Yes. This is what he will say - 30
 if the joints of a drainage pipe are not watertight roots will be attracted by the moisture which seeps underneath the pipes. First a hair root will enter and then the roots grow inside the drains. The drains in question have mortar joints. These are not satisfactory because they are not watertight. I agree to all of that. Then this "When this particular drainage block was constructed no provision was made for expansion or contraction". That is right. Then "Pipes expand or contract with the change of weather". Yes. He then says "This particular drainage block is very long and not flexible"? That is right, except that I make a reservation, a long piece of concrete is surprisingly flexible. A long telegraph pole will deflect a full five feet. This particular drainage block is very 40
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long and not flexible? It depends on amount of flexibility one would expect to find. Everything is flexible and I would think the rigidity on this drain is sufficient to maintain its rigidity under normal conditions but at the same time it is flexible and would accept any untoward impact against it. Even glass is flexible and can put your finger in about three-quarters of an inch. The answer would be it is not inflexible? It is hard to express. "Expansion and contraction will crack the pipes in time if they are not flexible"? The pipes will crack, all drain pipes crack. Then he says "These pipes are cracked", you agree? Yes. And "The cracks were about 10 to 30 years old," are you able to make any comment? Yes, I think that is right, the roots have been giving trouble for a considerable period. I suppose it would be pure speculation for anybody to say what degree of damage has been caused since 1954? I would think the major damage has been caused latterly.

ORCHESTON
RE-EXAMINED
KENT

I want to cover one or two matters referred to a moment or two ago, you have told us that no concrete is without a crack? That is right. We take it you can't construct a wall without having some minute cracks? That is correct. They are not there when the wall is built, but is due to expansion and contraction. Once that crack develops as a result of whatever caused it, contraction, expansion, the Pohutukawa trees or other trees in vicinity, if any water nearby, would cause a problem and a potential danger? You mean in any structure. Trees of that type have been very troublesome to reservoirs as they seek water. You agree or not agree there is therefore a position of some concern if there is a crack? Pohutukawas are notorious for searching for water. In this particular area on the plaintiff's side of the boundary we have a concrete wall built in two stages? In my opinion yes. When you have two sections of concrete apart from actual development of cracks of which you have spoken, will a crack appear on the join? Yes, that is right. Is there any significance imported to the development of such a crack? No, if it is in a wall water will percolate. Is there anything one can do to prevent that crack? You wouldn't see the crack if it were not for the roots. It is of no consequence that there is a crack at the join. Had there been no roots to penetrate into that crack, what have you to say about the top section of the wall, would it be satisfactory for the purpose for which it was put there? Perfectly satisfactory. It is accepted there are roots in the crack, in the early days when the trees were small would there be roots of any sort inside the crack? They would take time to get there and as hair roots would do no damage for a considerable number of years. Have you had a look at Mr. Morgan's side? No, I did not go on to this property, just looked over the fence. Can you tell us from your inspection whether the root system is below the level of that main crack, level with it or above? There are several trees and As the trees developed over

the years, what shortly put would you expect from the roots as they grow? They push the top of the wall off its base, the same as a mushroom would push its way through asphalt. As the roots push the top portion up what would happen to the pipes embedded in it? They would crack. The original cracking due to natural shrinkage is of no consequence as it is evenly spaced. Once the wall contracts they would be serious in places and would be larger on the convex side. With the wall pushing up the cracks on the pipe are likely to be on the top of the pipe. The pipes themselves develop cracks and are of little consequence. Sometimes they are troublesome but if there are trees in their vicinity they are always troublesome. Some point has been made that there has been a movement of the top section downwards, that the wall top has floated down? My opinion is that the top section has been pushed outwards towards the harbour, horizontally at first. If there was a crack full of roots then the tendency would be the anchoring of the top would be broken and there is a tendency for the top to move downwards, but I think there is only a small amount. There is a full three inches been pushed out, and obviously it looks as though it goes down a bit. That is a geometric fact.

COURT ADJOURNS 11.30 a.m.

COURT RESUMES 11.55 a.m.

Regarding the general size of the roots etc., is the crack now of a uniform width? It varies. What do you attribute the variation to? One of the trees has been a bit more vigorous and the roots have expanded more. On that basis the roots in some parts of the wall are more vigorous, what tendency would that have in lifting the upper part of the wall? It would be irregular. Would the wall necessarily lift straight up so that the outer face is directly in a line? There are also roots between her wall and the concrete work on his property surrounding his pipes. The roots have got between the two and have pushed her wall away and up. In other parts the roots are in the lower part of her wall and pushed that away, so that the combination of circumstances now gives the top of wall a wave and the bottom of the wall a wave. Once the upper section is loosened from its bed on the lower wall, if there was to be any movement of the top at all, which way would it be? At right angles to the crack. Then, any movement in longitudinal length up or down hill? It is apparently downhill. If you draw a vertical line and - the vertical line is no longer above each other to the extent of an inch and a half (demonstrates). The crack would throw them out. The vertical line appears to have gone over. I don't think the top has gone down at all.

ORCHESTON
REPLIES TO
HIS HONOUR

As I understand your theory, it is that the roots of the Pohutukawa trees have by their proximity to the wall caused cracks in the wall, that the roots have entered those cracks, and in their search for moisture have pressed against and cracked the pipes inside the wall eventually clogging those pipes and rendering them useless? Yes, except the roots wouldn't cause the cracks, the hair roots would go into the initial cracks. Would the pressure of the roots initially cause the cracks? Yes, they caused the major cracks. That then would have been a continuing process over a number of years? But more pronounced recently. Can it be said with any certainty that the progress of the roots in their destroying effect has been greater during the last six years than in the previous six years, i.e., greater since 1954 than from 1948 to 1954? Most certainly, and in the future it will accelerate again. Does it follow in your view that the destruction to the pipes arising from these roots can be said to have occurred substantially in the last six year period? I am afraid I don't quite realise why the six years are coming into it. I am having - I have a reason for that. I put it a little differently, if you go back to 1954, would in your opinion there have been substantial destruction to the pipes by reason of the entry of the roots from 1954 onwards? That is the period when obviously most of the damage would be done, but it would be more pronounced in the next six years. Supposing it was said in this case "Well this is a process that has been going on a great number of years, 20, 40 years, the damage was done before 1954, not the damage since 1954, but the damage before that is the material factor? The damage would have started 20 years ago but the principal damage has been done in the last six years. Up until the pipes are choked up they can be cleared with rods and when you can't get the rods through the drains become unserviceable and then it is only a matter of months. Assuming so far as the drains and stormwater and sewerage drains on Mrs. Khyatt's property are concerned were cleared by a drainlayer over the last six year period until they became too clogged to clear further, is there any other method you can think of whereby the trouble could have been abated than the method adopted? My whole proposition is no trees, no roots, no roots no trouble, but once the roots are in the drains, that is the time the trees should be cut down. I hate cutting trees down but these are a nuisance. Cutting down on somebody else's property would depend on acquiescence of the owner? Yes. Assuming that the roots of these trees are pushing their way into the wall on Mr. Morgan's property, and assuming further that there are no substantial cracks of a similar nature in that wall, has that any effect on mitigating as it were your theory or modifying it, the fact that a similar process may be occurring to his wall but with a different result. It is occurring, there are large roots and hundreds of smaller ones and within a year he will have to renew his drain. What you say about the cracks, will that process continue to his wall? If something isn't done the roots will percolate between the two walls in the

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absence of water in her drains, and they can get in the space between the two walls. It will push them apart and fracture one or both. It might not raise his but will push it aside. If that particular process continues, would the weight of the cast iron drainage pipes of Mrs. Khyatt's wall cause that to fall inwards on her property? The weight will have very little effect. It would require a movement of a good six inches before the top of her wall is likely to collapse. You think both walls will have an outward tendency due to the spreading between the walls? Yes. The position of the wall of Mrs. Khyatt's property is that there is approximately 1 to 1½ ft. of upper block, the block in which the old sewerage pipes were encased, solid block 1½ ft? Yes. That is the top block is it not? Yes. That rests on concrete you describe as lower block, 2½ to 3 ft. It varies from nothing to about 6 ft, where the steps have been cut in to make the zig zag. That lower block rests on solid rock? Yes. I want to be clear as to what you describe as the underpinning? The word underpinning describes a process where sections of a wall or excavation are cut away and rebuilt, below the general level, and then about fifteen feet away is done again and when that is hardened they will chop out this section and another 15 ft, long so the upper structure maintains its original position. The steps have been cut in, probably within the last twenty years here, whereas the drains are much older and that is why I suspect my theory is correct. The major part of the walls are quite strong and sound but in one or two cases it is only 2 or 3 or 4 inches thick, but there is no virtue in cutting out solid rock and putting in concrete. There is virtually no movement downwards, in fact there is no movement downwards in that lower wall. You say the original wall would have its key in the rock? Yes. How do you relate that? The original drain would be inside the top concrete, the top part has been built underneath the drains and the whole has been plastered so you can't see where the joints have been put in. The roots have got into the junction between old and new work and has pushed old work upwards so that a vertical mark would not make it appear as the top part has gone downhill. The vertical line would move over into this direction. The top block is the bottom of the trench and it would have its key in the rock. The bottom has been excavated after and the steps built. You mean it would find its support in the rock rather than the lower block? Yes, originally. You have told us that owing to the age of this structure that there is probably no provision for expansion and contraction? That is right. I think the relative dimension should be borne in mind. Expansion and contraction of the whole of the length might not be more than an eighth of an inch. As I understand it it will be suggested that it is the pressure of this rigid upper block on the lower block that has caused these cracks through which the roots are found? I don't agree with that. If that is a theory you don't agree with it? No, I don't. You think the pressure

of the upper block despite the absence of provision for contraction and expansion would not cause the type of cracks now present? There is no movement of the lower wall downwards. The whole movement is the top of the wall going upwards. It seems to be agreed that taking a birds eye view the wall does bend in a serpent like manner? Very slightly. It may have been built serpentine to begin with..... I want to ask whether you think the protrusion of the wall on one side in one place and the other side in another place is more the result of pressure from the rigid upper block or the result of the process which you have earlier described of the pressure of the roots? In my opinion the ravage of the roots is solely responsible. Do I understand you don't subscribe entirely to the view that the upper block is so rigid to be described as inflexible? A long concrete block like that could be pushed aside a good six inches and would come back to its original position. The trouble about root encroachment is that they grow slowly and ultimately a small pressure would push aside a wall of these dimensions. As between the theory put in its simplest form that on the one hand it is the weight of the roots that caused the cracks and on the other hand it is the pressure of the roots as the trees and roots grow, do you consider there is any common meeting place? No, the theory I put forward in my opinion is the correct one. A question was put to you in re-examination "Can you tell us from your inspection whether the root system is below the level of that main crack, level with it or above, there doesn't seem to be an answer. You state there are several trees? The depth of the root structure would be perhaps 2 or 3 ft. The crack is only up to 3 ins. Can you tell us from your inspection whether the root system is below the level of the main crack, level with it or above, can that be answered? I can't answer in general terms, each tree is different, each crack in relation to the tree is different, but the roots of the tree substantially are level with the cracks in the wall. On sloping ground the word 'level' is a dangerous one. At p.59 of the evidence you were asked when you first examined the property and you said thirteen months ago. You were asked were any roots visible when you made that examination and you answered yes, and you said thick roots and air roots, is that air roots or hair roots? There are also ariel roots. I gathered from your evidence that the destruction to the water pipes here might possibly be attributed to ariel roots and to the earth roots? There is evidence of that.. I looked at that aspect this morning and in parts the mat of the root structure is creeping over and into the cracks. I suppose the greater portion is due to earth roots? Yes.

HANNIFEY
WITNESS FOR
RESPONDENT

Calls PETER PAGE HANNIFEY. I am a duly qualified surveyor. I am a partner in the firm of H.B.Hannifey & Son. At the request of the plaintiff I inspected the property at 316 Oriental Parade. In particular, I have made an inspection of the concrete wall on the southern boundary. I made a

survey showing its position. I have also made an inspection of trees growing behind that wall. I have been on both sides to make an inspection. As to the concrete wall, I have prepared a survey plan which I produce (EXHIBIT H.) From that plan the concrete wall is within Mrs.Khyatt's boundary. There are two concrete walls, one entirely on her property enclosing her drains. The other is on Mr.Morgan's property. It is a concrete structure mostly on his property and partly on Mrs.Khyatt's property. The more northerly concrete wall falls within Mrs.Khyatt's boundary. I show the concrete garage on the sketch and have marked in what appears to be two concrete walls. The survey line is shown in green. The trees recorded have been inspected by me from Mr.Morgan's side. I examined the root structure of those trees also, and can say they grow in Mr.Morgan's property and some of the roots go through into the other property. The green overhanging is indicated by the dark portion. I satisfied myself with regard to the position of the stormwater and sewage drains on Mrs.Khyatt's property and I have recorded them on the plan. "11" wide concrete wall....." The next note I have is "narrow" referring to the wall structure on opposite side of the dividing line. That is on Mr.Morgan's side. His drains etc. are almost encased in concrete but I could see the top of them on occasions. I have had access to Council plans which showed where Mrs.Khyatt's stormwater emerged and I checked which was the sewer and which was the stormwater. My observations on the plan about the sewer and drain on Mr.Morgan's property were taken from - I could not say whether I took that from the City Council plans. There is an old four inch pipe and there is a root of a Pohutukawa tree going down and you can see it through a hole. The other diagram is a cross section through Mrs.Khyatt's dividing a cross section of the wall at the bottom. It is taken by measuring the concrete..... The note I made concerning Morgan's drain where I saw a Pohutukawa root visible is not the only evidence I found of the tree roots affecting his property. There are two four inch pipes visible which have been put there within the last twelve months. You can see there where they have chopped away the roots - that is the only place I have seen the roots on his property. Are you able to see inside the pipes lower down? They are encased in concrete. Are there any other Pohutukawa trees in the vicinity which would affect those drains? No.

HANNIFEY
CROSS
EXAMINED
BARTON

Would you be good enough to look at this plan (EXHIBIT 2). (TO BE PRODUCED LATER). The plan which I have asked you to look at was prepared by you in 1956 was it not? Yes. Or by your firm? Yes. And on that plan there is a line which purports to be the true boundary line? That is so. And another line drawn in green? Yes. Evidence is going to be called that the true boundary line is the line drawn in green? That is so. The green line shown on my plan. You agree that the line drawn in green is in fact the true

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boundary line? Yes. And the line which appears in your 1956 plan is in fact not true? That is so. That was a mistake? The position was in doing this survey in 1956 we reproduced a boundary of Lot 4 as shown on D.P. 1224 and that is the plan from which the title was issued. This plan has a mistake in it, and I reproduced that mistake. The plan D.P. 1224 contains the mistake, it was approved by the Chief Surveyor at that time, and it was the one from which the title was issued and there is a mistake in the boundary of about 4 1/2 inches. HIS HONOUR. That doesn't show the existence of any wall does it? No. It shows a bit of a fence at the bottom of the boundary, a small length of fence at the top boundary and a small bit of fence - COUNSEL. On your 1956 plan there appears an indication of the concrete wall? Yes. That is Mrs.Khyatt's wall. When you prepared the 1956 plan I take it that you merely reproduced mechanically the deposited plan in the Land Transfer office? That is right. Would it be a reasonable assumption to anyone looking at your 1956 plan that Mrs.Khyatt's wall was well within her property? Yes. Would it be a reasonable assumption to anyone who saw with his own eyes that Mrs.Khyatt's wall and Mr.Morgan's concrete structure were only at the most an inch apart but he would think that Mr.Morgan's structure was also on Mrs.Khyatt's property looking at that plan? I wouldn't get that idea. Mr.Morgan's wall is 10 ins., making a thickness of 21 ins., so I don't see that at all. Does the 1956 plan show the two walls separated by an inch? Only Mrs.Khyatt's wall to be up 1 1/2" inside her boundary. It goes up to 6 3/4" inside her boundary. HIS HONOUR. You say if anyone had the 1956 plan and visually saw there was only 1" between the two walls you would assume Mr.Morgan's wall came into Mrs.Khyatt's property? Yes. COUNSEL. I am not suggesting the whole of the structure is within her property, but you would agree that the observer visually knowing that the two structures were only an inch apart and seeing your 1956 plan would assume Mr.Morgan's structure was up to 6 3/4" within Mrs.Khyatt's property or up to 5 3/4"? Yes, you would assume it was within the property to that extent. This 1956 plan of yours was used in proceedings in the Magistrate's Court? Yes. Were you a witness? Yes. I think I said at the time I would not guarantee the plan. HIS HONOUR. Doesn't the 1961 plan show some point on the plan where Mrs.Khyatt's wall is 4" clear of the boundary on her own side? COUNSEL. That would seem to be so. HIS HONOUR. Wouldn't it equally follow if only a clearance of 1" at that point that Mr.Morgan's wall would be some 2 1/2 to 3 inches on Mrs.Khyatt's side? COUNSEL. Yes.

HIS HONOUR

COUNSEL

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COURT ADJOURNS 12.45 p.m.

COURT RESUMES 2.15 p.m.

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You were obviously involved in the early proceedings in 1956 were you not? Yes. Do you include among your qualifications

that of Structural Engineering? No. But some kind of engineering? Yes. Would the wall of Mrs.Khyatt's property and the concrete structure on Mr.Morgan's property fall within the category of civil engineering in regard to...? No. Are you able to speak from experience about these walls? No, I would not be competent to speak about it. Were you asked by Mrs.Khyatt to give a report about the wall and drains at all in 1956? No, we were asked to find the boundary. There was a dispute about a fence. Your instructions were limited to that? Yes, we had nothing to do with the drains. 10
 HIS HONOUR. Wasn't there another wall in issue in 1956?
 COUNSEL. Yes, there was no questions to the efficiency of the wall then. I was concerned with the boundary where the new wall now is. COUNSEL. Did you get instructions direct from Mrs.Khyatt or from her solicitor? I think I got them from her father. We have got the file. Were you concerned with boundaries of that property or position of wall prior to 1956? No.

HIS HONOUR
 COUNSEL

COUNSEL

HANNIFEY
 RE-EXAMINED
 KENT

Just to get the sequence, in 1956 you prepared a plan showing 20 what you thought was the correct boundary for the purposes of litigation over another wall? Yes, the other party wouldn't agree about it. Mrs.Khyatt wanted to put some sort of wall up near her house to support made of filling on Mr.Morgan's property. Was that plan in 1956 extended to include the whole boundary? The whole section. Do I understand in preparing it you relied on an old plan of the L.T. P..... Office? Yes. There was an error on one side. The calculated boundary was 4 or 4½ inches out. That is at the back, remote from the road. 30

HANNIFEY
 REPLIES TO
 HIS HONOUR

One point I would like cleared, have a look at your 1956 plan. I think it is the end of the wall as shown there is a clearance of 6½ inches into Mrs.Khyatt's property? That is right. If you look at the 1961 plan, in the relative position shown in the 1956 plan the clearance is shown as 3½ to 4 inches is it not? Yes. So there is some 3" difference in the two plans? Difference in front about 1 inch and the back of 5 or 6 inches. That inch difference arises from a difference of fixing by the two surveyors. The part at the back is largely due to an error in the plan. This much seems to be fair, for a greater length of the wall assuming the difference between the two walls to be an inch, the greater part of the length of Mrs.Khyatt's wall that of Mr.Morgan appears to extend on to her property? Yes. It encroaches increasingly as it goes up the hill, starts from nothing at the back of the shed. I suggest for the greater part of the length his wall appears to encroach on her property? Yes. Increasing up to as much as four inches, less an inch, three inches? Yes. 40 50

CANHAM
 WITNESS FOR
 RESPONDENT

Calls WILLIAM EDWARD CANHAM. I am an Inspector employed by the Wellington City Council and reside at Lyall Bay. I have been employed by the Council as an Inspector for nearly seven

years. On behalf of the plaintiff's solicitors I have checked over the records of the Council in regard to the work done on the drains at the plaintiff's property. I have traced those records back to 1944. We keep a file for such matters. The earliest record I have of complaints regarding the drains is on the 3rd March 1958. A subsequent report was made later that year, and it is dated 7th August 1958. I made the inspection myself in the March of that year, but I did not make an inspection in August but referred to the records of my previous visit. A complaint was received about seepage from the concrete walls. I put a test on 314 in 1955 I had been on that property. That test was negative so I then tested 316 and got a positive reaction. I then issued a notice to 316 to have it repaired. She went to Mr. Davies and he put the matter in hand and he cleared the drain. On the 7th August I was asked to report on the position. I reported in writing (REPORT READ). To the best of my belief - I did not know whether that work had been carried out. Speaking from memory I have not had occasion to attend to 314, apart from the time in 1945. As to the health point of view, it is essential for fractured sewage drains to be repaired. It appeared only one drain had been affected by roots and this was cleared (REPORT SUBMITTED TO COURT AS EXHIBIT I). HIS HONOUR. I understand from you that you made some report in regard to the drain in 314 in 1955? No, no report. Did you inspect the drain in that year? I was present when a drain blockage was cleared. Can you tell us from your recollection whether or not any part of the blockage was due to tree roots? I can't.

HIS HONOUR

CANHAM
CROSS
EXAMINED
BARTON

In the file you have, about 316, it contains only details of complaints and reports? That is all there is. So unless someone made a complaint to the City Council there would be nothing upon your files touching upon the matter? No. What is the position where a plumber or drainlayer has to do work on the property, does he have to obtain a permit? If a complaint is received we issue a notice, the plumber obtains a permit which is sent up to us and then sent back. We would not know anything about additions. If Mrs. Khyatt had obtained the services of a plumber to do repair work to the pipes, would your file have any indication of that? No, not necessarily. Are you yourself a registered plumber and drainlayer? Yes. Do you recall where it was in the wall that you looked at this drainage block when you went there in 1958? The drain was visible where the concrete was damaged, about eight feet up from the garage. You may not be able to recall this, but can you recall how far it was away from the nearest Pohutukawa tree? No. What did you do, did you break open the pipe at a point? No, we don't touch the pipe. Just made an external inspection? Yes. May I ask why it was that you made a test first of all of 314? A complaint was received that the seepage was in 314 and I remembered I had been there previously. Did you personally receive this complaint? No, it was entered in the complaint book. Did it

appear the complaint came from Mr.Morgan or Mrs.Khyatt?
Mrs.Khyatt. The inspection was made in March and the report
was compiled from the notes on my file made in March.

CANHAM
RE-EXAMINED
KENT

NO QUESTIONS.

CANHAM
CROSS
EXAMINED
CONTINUED
BARTON

MR.BARTON. From the statement in the Report, I take it you
walked up the path for about 100 ft.? No, looking down or
up the distance could be deceptive. You stood where the
seepage was and looked up the wall? Yes. You saw cracks
there? Yes. How wide were the cracks? Up to three inches.
And you saw roots in those cracks? Yes. Do you have any
expert knowledge of the type of root? No. I just saw there
were roots and vines. Did the crack and the roots appear to
you to be of recent origin or of some standing? I would not
know. Did you notice whether in those portions of the crack
that you observed the roots filled up the whole of the space
or were they in part resting on the bottom of the concrete
in the crack? The concrete had flaked away. The concrete is
irregular and I can say no more than that. Although the
concrete crack is irregular it runs almost the whole length
of the wall parallel to the top? Yes. Did you form the
view the upper part of this wall was a concrete drainage
block put into position at a different time? I thought the
wall had been built to a certain height, the drains laid,
and the rest of the concrete poured on top. The concrete poured
about the drains at the top was done at some other time than
the construction in the lower part? I could not say. You
didn't form any view of that? No. You knew this concrete
block contained a stormwater drain and a sewage drain? Yes.
And you could see could you in 1958 that there were certain
smaller pipes at the very top of the wall? Yes. And that
they had been covered originally with concrete but it had in
a large part flaked away? Yes. Did you notice roots and
vines at the level of those smaller pipes? I can't say I
did. With your knowledge of drainage matters, would you
be prepared to express a view about the effect of the long
drainage block running from the top of this property to
Oriental Parade and its liability to buckle because of the
weight on the bottom part of it? I could not express an
opinion as I was of opinion that the pipes had been covered
over afterwards. Did you notice that the top portion of the
wall at certain parts had moved away from the wall some parts
into Mr.Morgan's property and some into Mrs.Khyatt's property?
No. When you went into Mr.Morgan's property to make the tests
did you go to the bottom or top of his property? I went to the
top fitting of the drain. You got access to the pipe through
some inspection pipe? No, the sewer gully. That was in 1958,
was it the same place you went to in 1955 when you made your
previous visit? In 1955 it was half way down the bank. Did
you have ready access to the sewage pipe then? I think when
I got there on that occasion the men had finished the job. Are
you able to recall the age of the pipes on Mr.Morgan's

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property? No. Are you able to give any estimate of the age of the wall and concrete drainage block on Mrs. Khyatt's property? No.

CONCLUSION OF EVIDENCE FOR PLAINTIFF.

MR. BARTON OPENS AND CALLS:

MORRISON
WITNESS FOR
DEFENDANT
MR. BARTON
COUNSEL

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WALTER GORDON MORRISON. I reside in Wellington. I am the senior partner in W.G. Morrison and Partners, Civil Engineers. I have a Bachelor of Engineering Degree and am a Member of the Institution of Civil Engineers. I am a Member of the American Society of Civil Engineers and a Member of the N.Z. Institution of Engineers. I have practised in Wellington as a Consulting Engineer since about 1946. (EXHIBIT NO. 1 HANDED TO WITNESS.) I inspected the property in conjunction with Mr. Gandar on at least one occasion and I am satisfied that that plan accurately sets out the position, as regards the structural details, but I know nothing of the boundary. I noticed a concrete wall on the southern side of the boundary. My report is quite brief but it does say that I considered the plan very true. My report was very brief because the plan described the lower part of the wall in various terms, one part being described as massed concrete and other parts being described as plaster skin on a rock face. Further, in that region, it is hardly a wall. The top part containing the drainpipes is called a cement structure. It is really concrete work surrounding the drain pipes. There is nothing on the plan and nothing that I recollect to indicate whether that was concreted after the construction of the so-called wall but I would judge that the main purpose of the walls was to support this drain structure and that therefore the whole combination of wall drain pipes and concrete surrounds was constructed at very much the same time. A suggestion has been made by a witness Mr. Orcheston, that the upper part (the concrete drainage block) in which the pipes are encased was constructed first and laid on a bed or rock, and that then the lower part of the wall was put in by a process of underpinning. My view on that - I did not examine the site for any indication of such a condition. I would say it would be most unusual if that had been done, but short of a further inspection of the site I could not answer personally. When I inspected the site I noticed roots inside drain pipes and inside a crack running parallel to the top of the wall for quite some distance. I observed that one root was nearly an inch in diameter and that the three inch gap was fairly well filled with roots. Just being an ordinary gardener, I would say the root system was several years old. I observed no joints of the drainage pipes in this concrete block as I could not see as much as I would like of the state of the joints in the pipes and in fact I reported in September 1960 that a more positive statement could be made

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if the drainage block were opened up. I can only say that the joints give no indication of being defective because the roots are inside the pipes forcing their way through the walls or the joints. I did not notice what material had been used on the joints, but I recall some of the pipes were in concrete but for old pipes like that the jointing material would almost certainly be cement mortar. Cement mortar - nowadays because of the great damage caused by infiltration into sewers the trend is very strongly towards using rubber rings. That is for several reasons - one being that a rubber ring joint is more flexible and allows a certain degree of end movement of the pipes without cracks showing. In a drainage block such as we are concerned with thermal expansion will tend to cause longitudinal movement of the joints and any displacement due to tree roots would cause a slight degree of ROTATION. A cement joint cannot conform with these movements and hence becomes fractured. Furthermore with a cement joint there is always the possibility that a drain layer may not make a good job of it. When this particular drainage block was constructed, no provision was made for expansion and contraction as far as I can see. I used the expression thermal movement, that is what the layman calls changes of temperature; changes in humidity would have some effect on concrete too. I would describe this particular drainage block as a long one. In this context, I would say that drainpipes are normally underground and kept almost entirely from changes in temperature and humidity and the changes are very stable. This drainage block is in a funny locality at such a slope that it would get the direct rays of a midday sun and if it were free to move it would expand between summer and winter by may be half an inch. If it is not free to expand or contract, then very substantial stresses are set up in the concrete surrounding the pipes and anything in concrete 90 ft. long would be most certain to crack in a number of places.

COURT ADJOURNS 3.30 p.m.

COURT RESUMES 3.40 p.m. 40

Dealing with the length of the particular drainage block, I think in the answer you gave to a question just before the adjournment you dealt with flexibility. What effect upon movement if any will the fact that a drain is fixed at the top and at the bottom have? My comment about flexibility was that this particular system of drainpipes in concrete was not flexible. As to movement, if a structure such as this length of concrete block is prevented from moving at each end, then when it tries to expand due to temperature it will exert very strong forces amounting to many tons in this case on whatever restrains it at each end. And those strong forces may or may not cause cracks or fractures? The forces would tend to push the ends into the piles and might

crack round the ends, but they would of course compress the drainage block itself. Cracks in the drainage block or in the pipes would be caused by the reverse condition i.e. when temperature drops and the structure shrinks one effect which might happen during expansion with the ends prevented from moving is that the structure might buckle i.e. move out of line so as to accommodate the increased length due to temperature. This does happen with railway lines. You saw the cracks in the pipes with your own eye did you not? Yes. Were you able to form any opinion about the age of the crack or cracks you saw in the pipes? I would say 10, 20, 30 years, something like that. Did you see any whose age appeared to be since 1954? I didn't look for any differences, or recent cracks, but I did not observe any. What part do earthquakes play in movement of a structure of this kind? A structure of this kind would be much too stable to be affected by a general earthquake tremor such as might cause a high slender building or objects shall we say to fall over. If the earthquake were local enough to cause relative movement between the ground and different parts of the structure, then it would simply be broken wherever such movement took place. As a Consulting Engineer are you able to say whether earthquake movements of the second type would have occurred in this area say within the last 40 years? I would not attempt to say so with such complete authority, but I don't think there has been in that area in that period the sort of earthquake that would open up cracks in the streets. When was it you inspected the property? Once in company with Mr. Ross Gandar in August 1960, and then with Mr. Cooper one of my partners on the 6th September 1960. Have you formed any opinion about the most suitable method of repairing the situation as it was when you went there last year? I am an engineer and I think this system of pipes has shown that the thing wants an engineering approach, i.e., that with such a long exposed length of pipe expansion must be taken account of and something in the nature of cast iron pipes or other metal pipes with joints at perhaps fifteen foot centres instead of 2 or 3 foot centres would have been indicated. The pipes should be mounted on saddles so that there would be held laterally but free to move longitudinally and they should be at a place or places some sort of slip joint to combat movement and that the bottom end of each length is free to move there should be a suitable anchor block. What view do you take about the movement or keeping in place the concrete drainage block? I think that that is just a liability to everybody, but although it is a horrible job it might be cheaper and safe to use it as a base for a proper section of pipes. I don't know how many pipes would have to be used. What repairs to the concrete wall itself would in your opinion be necessary? No repairs would be effective for any period so long as the trees are there. Are there any cracks in that concrete wall that you saw? I would say not of any significance except as regards the drains. By that do you mean a three inch crack? I mean the walls below the drainage

structure may or may not be cracked. I don't know, but it would not matter. I think every retaining wall in Wellington is cracked. You know the long crack that runs about three inches in width up the wall? Yes. Do you draw any inference from the fact that it runs parallel to the top of the wall in a relatively straight line? It means that it follows the bunch of pipes and suggests there might be a discontinuity in structure at some time which is quite possible, i.e. that a bed would be laid first, the pipes assembled and the concrete put round them. That is what you mean about discontinuity? Yes. Did you see any signs of reinforcing in the wall or concrete drainage block? I made no note of it, I don't know, but I don't think so. Did you form any opinion as to the age of that crack, how long it had been there, or when it first appeared? I would say a long time ago. Ten years, twenty years, I don't know.

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MORRISON
CROSS
EXAMINED
KENT

Dealing with the general texture of concrete and pipes, perhaps you would be good enough to give your view on this, we have been told concrete generally is brittle to the extent so that it will crack about every eight feet, what do you think about that? That is a very difficult question to answer simply. Of its own volition. Concrete is notorious to cracks? Concrete is a material formed in a material plus cement with water. When the cement and water react together there is a very slight swelling and as the setting proceeds particularly when it is drying out, the concrete shrinks perhaps 6 parts per 1000 and it depends on the grading proportion of water and a variety of other factors what that shrinkage will be. I want a simple answer, does concrete have a tendency to crack? If it shrinks and were laid on a bed of ball bearings it would crack. The modern practice is to lay it on a bed of polythene first so it can shrink without cracking. Dealing with ordinary concrete work which we all have done, it has a tendency to crack? It would unless reinforced or has joints. We have been told it generally manifests cracks about the second year. Does it manifest itself comparatively shortly afterwards? Quite soon in most cases in a shorter period than that. So that in a wall of this construction, constructed as it was, would it be reasonable to suppose that it would develop some small cracks? Almost certain to. And if a concrete block with something added to the concrete base, made in two sections, it is reasonable to think that a crack would develop at the site of the joining? Except that I would hardly call it a crack. It would be a joint. Very minute? Yes, in the first place. It is one sitting on another. When you have concrete like that there is a point of joining which has the appearance of a hairline joining? Yes. It is reasonable to support a hairline crack manifested itself at the point of joining in many years ago? Yes. The pipes themselves without any outside agencies do develop minute cracks? I think what causes anything like that to crack is humidity etc. They do develop? I am not very experienced in that. They

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would develop less in the ground where conditions are stable. You place no significance on that because the seepage would be negligible and it is soon stopped by the calcium in the water? There is seepage through every material quite apart from the cracks. At all events, you have seen the trees in the vicinity of these walls? Yes. Of a Pohutukawa variety? Yes. One or two of them if not more are very closely adjacent to the wall? Yes. Do you know anything about the characteristics of the Pohutukawa trees? Nothing special, no. You mean as distinct from other trees, no, I don't. Do you know that Pohutukawa have not only very minute fibrous roots, roots developing from the root system, but even throw out arial roots of a gossamer character from the branches? No. We are told the Pohutukawa has that propensity? I cannot say anything about that. Pohutukawa roots in particular are roots that go to water? I know that about many trees. I want to turn to another topic, can you give us any idea of the age of this wall, drain installation inside it, from your experience? Not beyond a general impression that it was at least 30 years old. It might be a lot more. As you say, it is a fairly lengthy structure? Yes. Encased in concrete, and exposed to the elements? Yes. Assuming for the moment it is 40 or 45 years old, you would agree with me there have been many changes of temperature over that period. Wouldn't you have expected that expansion and contraction manifested itself many years ago? Yes, but the effects depend so very much on the quality of the concrete. It would be just as prone to expansion and contraction 40 years ago as it was 5 years ago? Yes. That is not to say those movements would have any effect. If they had some effect, you would have expected a seepage to happen? A seepage if cracks in the concrete caused cracks in the pipes. If there is minute cracking of a concrete wall and some roots in proximity thereto, do you agree those roots if small enough could start to penetrate that particular point where the minute crack is? Yes, and I would take steps by chemical means to eradicate that. In the course of time without chemical means you would expect that crack to become large? No, I mean by chemical means..... the force of the growth would force the crack open by mechanical means. As it opens up it opens up the possibility of other roots getting into the cracks, and so the process goes on? I agree. Unless that situation arrested you agree the situation would develop into a serious one? Yes. If there were water in the vicinity you would expect those roots in search of water to go there? Yes. If the pipe itself inside the concrete wall had a minute fissure the same root on its fine state would try and search out water? Not unless the crack in the pipe was reproduced in the concrete outside. If close thereto or nearby? Yes. Once it is inside the pipe then a dangerous state develops? Yes, it is well supplied with water. In this particular case we have we not first of all a concrete wall in which there is a crack between the lower structure and the top portion? A crack or joint. Above that crack you have sewage

and stormwater pipes? I don't know immediately above, some few inches above. You then some years later find that the joint which was originally a minute crack has developed into a fissure in some places of three inches? Yes. With a mass of roots? Yes. Over the last five or six years evidence has been given by a plumber that he has on five occasions cleared the drains of roots. Those roots must have got into the drain somewhere through the concrete wall? That would suggest roots somehow penetrated the wall, the concrete casing, and penetrated the drains and expanded until they exploded it? Yes, it also depends on whether the plumber did a proper job. Whether he cleared it in the first instance or should have taken fuller steps. Yo- I am surprised to be told that the roots were completely cleared so many times. We have also been told that - There is a concrete wall on the other side in Mr.Morgan's property? I am not sure what you mean. Running down the southern side of our wall is a concrete structure slightly lower on Mr.Morgan's side of the boundary? No, I don't know what you mean. There is a concrete wall right alongside this wall? I did not know. There is evidence that inside there are old drains or current drains? I don't know about that. There is some evidence there was trouble with Mr.Morgan's drains in 1955 . We have also evidence that at least in an old earthenware drain there is a presence of roots there. Wouldn't all that together with our drains as well suggest it is roots that have got out of control? That is causing trouble all up that line? I would agree as I think I said that it has caused movement of the concrete blocks. It has caused them to lift and the roots have got into the drains. As they have grown they have caused the block to lift more and more to about three inches? Yes. At some parts the roots are more profuse than at other parts? Yes. So that the lifting motion would vary according to the strength and profusion of the roots at different points? Yes, the plan shows a fairly regular increase in the width of the gap and then a diminuation. If there was for the sake of argument an unusual or uneven lift due to diff. and strength in quantity of roots that would give an uneven lift to the top? Yes. If the top block of concrete does lift in an uneven fashion you would expect that to have some effect upon the drain structures which are enclosed? Yes.

MORRISON
RE-EXAMINED
BARTON

In answer to the question put by my learned friend, directed to the movement of the hair roots through the concrete block into the drain pipes, you said "The roots would not get into the drain pipes unless the crack in the pipe was reproduced against the crack in the concrete" is that correct? If it was matched by the corresponding crack in the concrete. And it is your opinion that that is the way in which the hair roots got into the pipes, through a crack in the concrete which matched a crack in the pipe? The pipes themselves are relatively very weak and if there was movement of the concrete block caused by a shrinkage, temperature movement

or anything else, which was severe enough to crack the concrete block, it would almost certainly crack the pipe at the same time. And you have as I think you said in evidence in chief, seen the cracks in these pipes during your inspections of the property? I said I could not see as much as I wanted to as it wasn't exposed. There are cracks in the concrete which does expose them. Did you see any cracks in the pipes? I don't think so. How old do you think the Pohutukawa trees are? I have no expert knowledge but I say at least 20 years, it might be a lot more. I wonder if I could put this hypothesis to you, my friend has suggested that it was the movement of the roots into these cracks which forced the concrete block upwards and is still doing so, you understand that is what is suggested to you? I took him to mean more the presence of roots in the joints. This is the hypothesis I want to put to you - accepting as you and other witnesses seem to accept that at a joint there is likely to be a crack very early in the history of the structure, and assuming that these trees close to the wall are fifty years' old, would you have expected the present state of affairs only to be visible in the last six years? Oh, no. Would you have expected damage to have been caused to the drainage block and pipe only in the last six years? Certainly not particularly in view of what I was told a few minutes ago about the growth of the roots. 10 20

MORRISON
REPLIES TO
HIS HONOUR

HIS HONOUR. If the damage to the pipes in this wall were caused by the intrusion of Pohutukawa roots, the growth in damage would have some relation to the growth of the roots would it not? Yes. And if the Pohutukawa trees grow very very slightly in their early years but much more extensively in their later years, then the growth would be greater in the later years would it not than in the earlier years? With your hypothesis certainly. You told us that in your view when this particular drainage block was constructed no provision was made for expansion or contraction? Yes. Do you agree that at the time the concrete block was presumably constructed such provision was not part and parcel of normal practice? Yes I do, I don't know that it is part and parcel of the normal practice now. In view of the hillside peculiarities of Wellington block drainage constructions of this kind must be found in many hillside sections? I have not seen anything of this size nor anything like it. Would you kindly have a look at Photos A. 5, 7 and 8. You see those particular photos, you agree the photos of the cracks clearly show the intrusion of root growth? Yes. Would they be characteristic cracks to be seen in concrete blocks enclosing drainage in your experience? I have had no experience of this apart from this case. Your answer would be you have not encountered a similar type of root filled cracks? No, I have not. If these trees were built up virtually to the concrete wall do you eliminate the possibility of the pressure of the growing roots, expanding roots of such trees, causing cracks 30 40 50

in concrete? No, that is another manifestation of the power of roots. I understood you to say to Mr. Barton that if the concrete cracks and the concrete encased sewerage and and stormwater pipes, you would expect the cracking in the concrete to result in a cracking of the pipes in the same area, did you say that? Yes, not only in the same area but at the same crack. Is it a reasonable hypothesis that if the cracks in the concrete were caused by the pressure of the roots and the crack caused at the point of the pipes, that the roots in time would find ready entrance into the pipes at that point? Yes, the first major crack system is the longitudinal one. It has lifted the old block. If in lifting or due to temperature changes there became cracks, then I feel certain most of them would be reproduced in the pipes. Of course the root growth would eventually block the pipe? Yes, it has done so. As you know, the fresh pipes in cast iron have been constructed on the side of the wall, are you aware of that? I don't recall it. So that if the root growth continues to block the pipes which incidentally are not being used now for stormwater and sewerage, could a stage arise where the blockage of the pipes caused further cracks in the concrete? I don't think a blockage could. I put it another way, the growth of the roots? If it was sufficient to burst the pipes then it would probably burst its surroundings. If it burst the concrete part of the wall would presumably fall one side or the other? Not necessarily. Quite a number of longitudinal cracks are at different levels. You say if the roots continue to grow in the main pipes the wall could not collapse? I say there is a danger to split the concrete. If the root growth continues there is a possibility of the ultimate collapse of the wall isn't there? I am sorry to be difficult, but the collapse of the wall doesn't seem to apply to this sort of thing. You get the disintegration of the top block which would fall off in bits. I would not call that the collapse of a wall. We will put it your way, we will get ultimate disintegration of the top block? Yes. Short of removing the trees and perhaps the roots is there any way that disintegration not carrying on? You have to stop the process if you want to stop disintegration. So far as what you do to the tree or roots you don't put yourself forward as being able to give any assistance in the matter? No.

CASE CONTINUED 26th April 1961.
Mr. Barton Calls:

HOLMES
 WITNESS FOR
 DEFENDANT

PETER ROBERT HOLMES. I carry on business at 1 High Street, Lower Hutt - public valuer. Director of H.E. Laten Ltd. Registered valuer. Associate of the Institute of Valuers; taken professional examinations in urban valuation. I have had 15 years practical experience as a valuer, mostly in Wellington but three years in Christchurch. I occupied a senior position in Valuation Department for some years.

District Valuer for five years. I have been a public valuer in Wellington since 1959. I also have experience as a builder. Learnt the trade and worked in it for three years. In accordance with instructions I have made inspections of the property at 314 and 316 Oriental Parade, particularly the concrete structures running along the boundary. I inspected the concrete wall. In the course of my enquiries into this matter I made investigation of the records of the house at 316 Oriental Parade; the result showed it was originally built in 1898. I enquired at Valuation office into the age of this house and they had in their field notes that it was built in 1898. I also made enquiries into the valuation of the property at various stages particularly in the 1940's and 1950's. The valuation in 1949 I looked at the valuation record and in the Roll for each date. The Government valuation in 1949 was based on 1942 Land Sales value. I have a note of the '49 valuation. (witness refers to his notes) £3725 capital value; I inspected the Government valuation in 1955, £4450 capital value. Latest Government valuation November '59 £5500. I enquired from Public Trust MR.KENT OBJECTS. My firm was not involved in the sale by the Public Trust Office. When I made enquiries at P.T.O. I didn't see any documentary figures at which the property was put up for sale, and I didn't see the price paid at P.T.O. But I saw it recorded on valuation slip and also Institute of Valuers serve their members with sales. I saw the valuation slip in the Valuation Department. COURT. Is it usual to record the notice of sale? Yes. (Subject to confirmation by Mr.Kent figure is given by Mr.Barton at £3,600). When I inspected the property I observed cracks in concrete wall on southern side of Mrs.Khyatt's property. Age of cracks - they had the appearance of being old cracks. I would expect them to be much older than six years. Assuming the cracks were visible in 1955 - and with the cracks they appeared on the day of inspection (i.e. six years later) I would expect any buyer to pay something less because of the appearance of the wall. It is impossible to say how much less, but I feel it would affect the value. If I were advising a purchaser, assuming in 1955 it was much as I saw it in 1960, the method which I would adopt would be to estimate the reasonable cost of repairs or replacement of the wall and then make some portion of that as a deduction from the value. With my experience as a builder I directed my mind to the cost of repairing the wall in 1960. I made estimates, and estimate it would cost approximately £600 to substantially correct the damage by replacing the top portion of the wall and reinforcing, or if it was found necessary to replace bottom portion and renew the drains where necessary. The existing wall is 63 years old. It was built at a time when reinforcing wasn't generally used in walls of that type and if a wall was constructed to the standards in general use today it would be superior and to some degree, add value. Since the cast iron were put up against the existing wall I have inspected the property. I

COURT

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considered the use of cast iron pipes as a possibility. There would be approximately 60 odd pounds of cast iron piping necessary to run down the damaged drainage block; labour etc. would have to be added to that. Account for sewer and plumbing etc. £556. The account is not detailed and the only comment I could pass is that it would appear to cover a larger job than I had envisaged on my inspection. I cannot reconcile the £556 against what I had considered the amount of cast iron piping necessary and the only explanation seems to me to be further work on underground drainage. I did notice a W.C. pan had been installed in the garage but I don't know if this was new work because I didn't go inside the garage. As to the wall itself: My opinion as to its quality and effectiveness: The wall is old; its not a good one. There is no reinforcing and it has been poured against a bank. In parts it would be approximately one foot thick - its hard to say where - its general thickness would appear to be approximately 1' but where the bank has projected the wall is much thinner. Another factor is that provision was made for weep holes would, could affect the wall. Purpose of weep holes: They are to allow for escape of water pressure. If no provision is made for them one would expect that damage would result, depending on amount of seepage and water in the particular locality. Quality of concrete used appeared to be fine aggregates mainly, and there are numerous cracks in the structure. I observed a long break running parallel to top of this wall almost the whole length of the boundary down the hill. Through having seen and inspected that break - the break was filled with roots. I think that the bottom part of wall was built approximately at the same time as the top, that the method of construction was to construct the wall as a bed on which to lay sewer and stormwater drains. According to Council records the drainage plan shows that sewer drainage was available in that locality in 1894. That is the Oriental Parade property. So I'm fairly certain sewerage was available when the house was erected. My view is that the wall would be built about the same time as the house but the main question or consideration is that there is a joint between the retaining wall and drainage block.- retaining is the bottom part of wall. Originally I thought that the drainage block may have been constructed some time later; that with sewerage available in the area when the dwelling was constructed, I think the general construction must have been about the same time. Reinforcing - I could not see it - there is some piping - old water pipes etc. exposed in places running down the drainage block - at the top. In view of fact that I did not see any sign of reinforcing and in view of my judgment about quality of wall, the cause of the present state of the wall: Reinforcing wasn't generally used in that type of structure at the time it was built. The wall -lacking reinforcing - and being composed of a fairly low grade concrete would tend to offer less resistance to fracture than the type of wall which would be built today.

As to the present state of the crack with the roots in it, there is no doubt that the roots had been attracted to the water seeping from fractured drain and to force their way in between bottom wall and drainage block above, and in effect push the drainage block upwards from the wall. The roots between the concrete drainage block and lower part of the wall? The way the wall was constructed it is most unlikely that it would not have cracked at some stage; the water being present with drainage system would have attracted the roots from the trees. Generally, if the wall was of modern construction, properly reinforced, I would not expect anything like the damage which has been done by the roots. The present condition of the wall - How long established is the present condition? I would be surprised if substantial cracking hadn't been evident for 15 years or longer. Have you formed any opinion as to the present value of Mrs. Khyatt's property as a whole? I haven't inspected inside and have only generally observed the outside. 10

MORNING ADJOURNMENT: 20

HOLMES
CROSS
EXAMINED
KENT

This wall runs down a fairly steep incline? Yes, Do you agree it appears to be built on rock surface? On rock and rock. At back of this wall there is another wall lower in height some inches? Yes. Do you agree adjacent to that wall there are several trees in close proximity to the wall itself? Yes. Do you agree that in some places the trees appear to be forcing themselves against the wall? Yes, they are very close to wall. If pressure was exercised by trunk of tree would you expect it to break at point of joinder? Yes, I think it would. If it wasn't reinforced. You have seen several pipes running through top sector, whether they were inserted for that purpose they would have effect of reinforcing? Yes, the waterpipes should stiffen up the drainage block. Sofaras weep holes are concerned, they are generally inserted at the base? Throughout surface of the wall staggered. In this case apart from concrete wall there is very little behind this wall? It is 5' in height, there is ground behind it. There is concrete wall only for short distance. Whatever is behind it is also of rock? At the one point I could see it yes. Flow of water would be down the hill? Yes. Same direction as the wall? Yes. This wall was built many years ago? Yes. In those days they didn't have the technique we employ today? That is so. But you agree that it is a fairly good test that has subsisted for 60 odd years? It hasn't fallen down yet. You would also agree that the people in those days couldn't get a better wall except what they were given? I think a more substantial wall could have been erected in those days. There are hundreds erected round Wellington, homes which were erected to a similar pattern? Thousands, yes. Somehow or other damage has been caused to this wall by the protrusion of roots and fairly large crack? Yes. You agree that if this process is not arrested it will go on? Yes. There are 30 40 50

hundreds of walls erected 50 years ago that have cracks - that have developed cracks? Yes. If you have two parts of a wall erected at two different points of time whether hours or years you would expect crack to develop at point of joint? There is an inherent weakness in structure which results in a very fine crack. There is not much you can do about that? It can be assisted with reinforcement.

(Evidence given by Mr. Davis registered plumber: p.46.)

"In my inspection of wall..... weight. Would you agree with that? No, I don't agree it was not a retaining wall. There is no unusual weight. The whole thing is one structure. Its not carrying any unusual earth weight? I wouldn't say there is any unusual pressure being used on it. Do you agree that concrete - earthenware pipes sustains crack - its not unusual for pipes to sustain crack or fracture in same area? Yes. If drains suffer a fracture they will leak? Yes. That passes itself outside? Yes. So if there had been cracks in this drainage system within that concrete wall it should have manifested itself in the way of leaks? Yes. Leakage in sewerage system is important and serious matter? 20
A bad leak, yes. Evidence of plaintiff that she noticed crack in top of wall when she first purchased the property? I only heard part of it. Mr. Breeden's evidence? I didn't hear his. P.42. "When I first went to the premises..... alright". You didn't hear that evidence? No. Assuming for the sake of argument that over past 5 or 6 years there has been a very fast growth in these Pohutukawa trees, pressure has been asserted on the wall, you would expect the wall to develop something in the nature of cracks? Yes. Those cracks in outside wall could be expected to cause cracks to drainage system? Yes. That would cause leakage? Yes. The roots of the trees would. A crack just developed in the wall at point of join and assuming pipes sometimes have slight cracks or fissures that can't be avoided - did you hear Mr. Davis's evidence? Yes. If that happened the roots would grow, expand the crack until you had serious trouble? When the roots got in they would grow. You must have seen the growth and they are quite phenomenal? Yes. So far as price of property is concerned, she has purchased this at something £800 over the value at that time; there are still some bargains to be had in Land Agency field? Yes. 40
There are some properties which just stick, you just can't sell them although the value appears to be there? Yes. If the property is wholly or partially occupied or tenants that causes a purchaser to reduce? Yes. At times a purchaser has sometimes made a ridiculous offer which has been accepted? Yes. When you are buying property it does affect the property whether you have tenants in the house? It does affect it. Drainage cost of installing this system - cast iron: the price was £56 your estimate would be £600? Not for that job. Did you envisage taking off the top layer of concrete and replacing the drainage system where the block used to be? That could be done for £600 with earthenware pipes? Yes. Have you had much experience in pricing in drainage work? 50

The only thing that is unseen in this drain is the extent the drain goes down into the ground and I couldn't estimate that. Your price wouldn't envisage cost of repairing this wall with plaster? I had in mind casting a pier against the weakest portion of wall and strengthening, taking off top block and replacing drain but I didn't anticipate digging drains up and running them to Oriental Parade. We don't know until we get inside whether we have to do the whole drain or not. Even down where garage is some roots have made themselves apparent? There was only 8' of wall. 10
It was affected by roots? Yes, it gets much smaller. That's just a general estimate £600? Yes. It was £556 and we anticipate another £175 to repair the wall - £730? I say £600 that is what I worked it out at. I may say I wouldn't have used the method they have for appearances sake. Its effective? Yes. That appearance affects the approach value? I don't think anyone would mind it.

HOLMES
RE-EXAMINED
BARTON

Did your estimate that you have given include the casting of a pier against the wall? Yes. Accepting Mr. Kent's hypothesis that roots got into minute cracks, they grew there, pressure caused the concrete drainage block to lift, and that caused fracture in the pipe which caused seepage and roots got into the pipe, accepting all that, from your inspection of wall in 1960, are you able to say whether that process took place substantially before or after 1954? I honestly think that process has been going on for many many years. Are you able to give some indication about the relative proportion of this process that took place before 1954? It is only an opinion. I've no special knowledge of Pohutukawa trees, but I would be surprised if there wasn't a substantial crack there before. You base that opinion on your examination of the wall in 1960 including the crack? Yes. 20 30

HOLMES
REPLIES TO
HIS HONOUR

You accept what Mr. Barton called Mr. Kent's hypothesis as a perfectly likely cause of the cracking of the pipe the force of roots cracking the wall, the pipes breaking at that point, intrusion of the roots and the consequent unserviceability of the drains - you didn't reject that? The roots have most certainly caused the damage. You don't reject as a theory that the roots have got into the wall in the manner I've described? The wall constructed the way it is it is weak and offered very little resistance. Do you reject as a theory that accounts for the breaking of the pipes the theory of the intrusion of the roots through cracks caused through the pressure? I think it is. Do you substitute any other theory to your mind appears more likely than the theory Mr. Kent advanced? The wall is weak and the cracks inevitably resulted. It follows that the origin of the cracks which resulted in the breaking of the pipes was pressure against weak wall of those powerful roots? Yes. Once the roots got into the wall and caused drainage block to lift the process of damage to the pipe would be quickened? Yes. Do you think 40 50

it illogical to include - if this theory be accepted - that the process of the damage during the six years after 1954, could conceivably be quicker than the process prior to 1954? It could well be but as I say I've no special knowledge of Pohutukawa roots. If on inspection by a purchaser in 1955 the wall was in its present condition that would be likely to be obvious during the long climb up to the house itself? You couldn't fail to see it. Equally obvious would be intrusion of these roots into the cracks, if the condition was the same? Yes. Weep holes - they would be staggered ; 10
do you mean there would be weep holes in drainage block in the lower portion as well? You put weep holes in lower portion not in drainage block. Drainage block was about 18" deep. Weep holes and you said it was natural to find moisture even if the pipes were unaffected? I did not say that Sir. There would be seepage where there had been excavation through a bank. It would be from the bank. If we accept the theory that these roots go in search of moisture or water one would expect with weep holes they would also attract roots? I don't think they would because I don't think there 20
would be a great deal of water behind this wall. Have you any reason to think that the roots would be less attracted by the moisture in weep holes than moisture caused by drainage block? They go in search of the most prolific water - in this case the drain which was cracked and ideal conditions for the roots. Progress of root damage would be greater when pipes were cracked? Yes. Precisely when the pipes cracked is speculation? Yes. The price paid: The presence in the premises of a tenant might diminish any offer for purchase; can you eliminate the steepness of the climb as a possible deterrent feature? It would affect 30
value generally but price paid was a low price for Oriental Bay property. I think the aspect of protected tenancy accounted for the greater majority of the reduction but general appearance of the wall with cracks could have some affect.

STERLING
WITNESS FOR
DEFENDANT

Calls JAMES COULL STERLING. I live at 35 Mandaley Terrace, Khandallah. Fellow of R.N.Z. Institute of Horticulture, and N.Z. Department of Horticulture. I have experience of trees generally and Pohutukawa trees in particular. I've 40
been in N.Z. 35 years. On instructions I have visited Mr.Morgan's property at 314 Oriental Parade and inspected the Pohutukawa trees. I would say the trees are 50 years old and could be older. I am of opinion that the trees were there before the concrete. It is characteristic of Pohutukawa trees they have strong root system also an adventitious which come out from the trunk or branches, they come up from any part of the stem, i.e., no definite part of the stem. For a Pohutukawa root system to become 50
established it depends on the condition the trees are growing under. These were very exposed on hard clay rocky face and annual growth will be consequently very slow. They are battling for life. Branches have been

pollard from time to time - cut back - this would be to avoid contact with wires and to give the tree more stability. Its on a hillside and in very windy position. I made close examination of the roots I saw on a boundary wall. On numerous occasions I have seen this happen. I was quite familiar with what would be in the cracks. Some of these roots are quite thick. In the drains I didn't see any as thick as my wrist, but in the ground they are visible as thick as my arm. In crack in top of wall I observed a large amount of Pohutukawa root, some of it quite thick - the thickest as thick as my thumb. It is a thick hair root that gets into a crack and that expands. If there were no moisture - it will grow and solid stone, rock, lump of concrete, it holds the moisture consequently the root would get more moisture than if it were in the surface of the ground. In my experience the intrusion of Pohutukawa roots in other than in a crack; I have not noticed this. Age of roots in this long crack; these roots have been round that wall doing damage for the past 30 years. The root which I saw in the crack as thick as my thumb got into the crack as a hair root some years ago and developed and it is not that I have in mind when I mention the estimate of time. But there has been root system above ground scrambling seeking moisture and I would say that has been going on and has been visible for 30 years. The root as thick as my thumb is an old root - its not young - it could possibly be 15 years old. It is not younger than six years old. If roots are cut back affect upon rate of growth: - In some cases Pohutukawa roots grow very quickly - the roots in the ground - meaning that all trees when grown in the open ground are - sharp spades are driven alongside them, the roots are cut in January young roots branch out from the cuts, and by June the plant can be lifted with that more massive root holding the soil together and that will give you an idea how quickly roots in the ground will grow. Then again I should be in charge of the Botanical Gardens for 19 years in Mr. McKenzie's time and there are big Pohutukawa trees in the Gardens with adventitious roots hanging down from the stems. My own personal view I thought these were marvellous and when conducting anyone round the Gardens, especially from overseas I would draw their attention to it to show the characteristics of the tree. Unfortunately boys would look at them with a knife and cut them and that type of root very often dies. The live part is only in the tip - it didn't shoot away. HIS HONOUR. The aerial root? Yes. But the roots in the ground when cut will shoot away and very often pruning encourages growth. If these roots were removed bodily from the soil would that be simple or difficult? Fairly difficult. Would it involve structural work upon Mrs. Khyatt's concrete wall - root and branch? It would weaken the hillside in that part and the wall. In Morgan's property. You would have to take quite a big hole to get that tree out and the roots are quite a size and they'll have to be chopped with an axe and that will also vibrate

HIS HONOUR

along root system still left in the ground causing weakness. Pohutukawa roots are hard. Pohutukawa tree - that is the natural habitat - on exposed country - seafronts, rocky hillsides, they will grow best on loose rocky hillsides. The four trees have been planted - I think. I've been within last few days to the property. Seedlings in Mrs.Khyatt's property on the bank running at right angles to the wall; there are seedlings in both properties. I saw them in Khyatts. Seed of Pohutukawa is very minute - just the finest of dust. Were you able to form any opinion of the age? They are in very poor condition and having a struggle. Under good conditions the home gardener buys from the nursery a Pohutukawa to grow in his garden a tree in 12" high and at that stage is 4 or 5 years old. These seedlings are just existing and growth is very slow and they could be 4 or 5 years old but it depends greatly on the position they are in. It would be very hard to say the exact year these seedlings started. It has been suggested that the roots of these Pohutukawa trees in Mr.Morgan's property and the growth of the trunk have caused the wall on Mr.Morgan's property to move? The way I looked at the whole thing was that the trees were there first. If the drainage were there first I can't understand how any one would plant the trees after the drainage was put down. This pushing process causing damage began six years ago? I think it has been going on for quite a long time. Growth of these trees is very very slow. What would you say to suggestion that as the growth is so slow it might only be within last six years that the roots and the trunk had exerted pressure? I think pressure has been there 30 years ago. HIS HONOUR. The presence of the growing roots assisted by the moisture has developed from the pipe - the roots were less harmful without the water - in other words there is a quicker acceleration of damage since the pipes cracked, than before the pipes cracked? The concrete the soil adhering hard up against the concrete would have greater dampness than the soil out from the concrete. That attracted them at the start to concrete structure. On the driest day a stone on the ground is damp underneath. If there was any moisture in the soil it would be up against the concrete. Do you say no roots do damage? Oh no. But that would grow that would cause the roots to go there. The moisture attracting them to the wall? Yes. The plants have been planted so close to the concrete structure - quite close to it. Would you accept that with damage in the block and in the pipes inside drainage block together with roots inside cracks there might well be an acceleration in growth of roots over last six years? Better conditions you give the plants the better they'll grow. The roots have been there for quite a number of years and they haven't grown any quicker over the last six years. HIS HONOUR. You have not had to consider pipes being cracked? We have had to lay a new drainage system through roots getting in. Were pipes encased in concrete? No just in the earth themselves.

HIS HONOUR

HIS HONOUR

STERLING
CROSS
EXAMINED
KENT

If you were advising someone to plant Pohutukawas I take it you would not advise them to plant them close to a drainage system? No - I always advise to plant clear of drainage system. You never know with trees where the roots are likely to get and what the damage will be? Yes. Different trees have different root systems - some strong. Pohutukawas have hard strong root system? Yes. And hard to get rid of by excavating? Yes. They don't shoot from the root - once you cut it it doesn't grow any more. Eventually you get strong roots - unless you destroy them - that affects a strong structure? If you cut one perhaps you might get six more. In days gone by when trees have been planted and over the years they've grown and grown, root system being attracted to concrete wall and eventually some day they could exert enough pressure to force the whole or part of concrete wall out of plumb? Yes. This growth has been going on for years and then the damage will manifest itself? I've never actually seen a similar situation. But that is what you envisage would happen? Yes. That might manifest itself in number of cracks? Yes. When you get a crack in concrete wall the drains themselves will get a crack, and is it reasonable to suppose the roots would search out that and the roots make for them? Yes. If something is not done about these roots they will go on increasing in size? Yes. No one can foresee what is going to happen? No. But its not going to be to the advantage of wall or drainage? No. Mr.Morgan's own drainage system is in same area and if you were advising a man wouldn't you say something to a man about the danger of these roots? Yes. Its no good just topping the trees? No. There is only one thing and that is to take the roots out - the drainage system the real danger? Yes. Unless he keeps moving the roots - you can open a drain and keep pulling at the roots. If you were advising a man to plant on that section the worst place is on a boundary with concrete walls with drainage system.

LUNCHEON ADJOURNMENT.

CLENDON
WITNESS FOR
DEFENDANT

Calls THOMAS VIVIAN CLENDON. Member of Edwards & Clendon Consulting Engineers 26 Fitzherbert Terrace, Wellington. Member of the Institution of Civil Engineers, Member of N.Z. Institute of Engineers. Regd. Engineer, and have been in engineering profession since 1924, Consulting Engineer with my own practice for 12 years. I made an inspection on 14 April 1961 of the property at 316 Oriental Parade on which there is the wall with the drainage block in it. From the general appearance of the wall I would estimate the wall to have been built about 1900. The wall has a lower portion then a concrete drainage block in the upper part. The drainage block appeared to have been laid after bottom wall was constructed. Underpinning: It could have been done that way but it indicated to me the first procedure had been used; it seemed unlikely that it would be done from top down. Bonding between upper and lower

portion of wall - reinforcing - There were no reinforcing bars between top and bottom portion. Condition of this wall at the moment: I would say condition was poor and deterioration had taken place over the years. There is a long crack or fracture running parallel to the top of this wall and I observed this. I have a very definite opinion on the crack being where it was. It was along a line of weakness where fresh concrete had been poured on old concrete. In this crack I observed roots and other growth of trees; along most of this length I observed this. Through solid portions of wall no roots were visible; they wouldn't be expected to penetrate into solid concrete. Roots enter a crack or a defect in the masonry. When I made inspection on 14 April I did so in company with Mr. Gandar. On that occasion we had a plan which was prepared by Mr. Gandar. (PLAN SHOWN TO WITNESS). I took special notice of the wall at each of the landings up the zig zag path. I refer to these landings as A, B, C, & D. "A" is the last landing immediately behind the shed i.e. the lowest landing. Width of fracture in wall at that point and all landings (WITNESS REFERS TO NOTES). Width of fracture at landing "A" between one-half to one quarter inches. There were roots near upper end of fracture but most of the fracture was free of roots. Landing "B": Average width at this landing was three-quarters inch. Very little variation. The crack was full of root growth. The roots looked to be of very long standing and appeared to me from Pohutukawa tree and the nearest tree is quite a distance from that particular crack, quite a number of feet up the hill. In Gandar's plan at Landing "B" there is a drawing of an indentation in the wall of what appears to be a wooden post. I observed that. The plan accurately shows what I observed. Landing "C": The longest stretch of the wall. Fracture 3" to 4" over greatest portion but reduced to about 2" over the last 6'. The whole crack was practically full with growth, some roots I measured and were up to 2" in diameter. At that landing there is the lowest of the Pohutukawa. Landing "D": Highest of the landings. I observed the fracture running along that wall - it was approximately 2" wide right along that landing - not quite as long as fracture at landing "C" but quite a long fracture. Approximate size of root growth in this fracture; it was peculiar - it was like a mat of approximately $\frac{1}{8}$ " deep lying across the bottom of the fracture but there was a clear gap between the root mat and upper concrete. The root growth in Landing "D" did not fill the whole of the fracture by any means at all. The fracture at landing "D" went to the top of the wall. The diagram indicates the way in which the fracture ran and the point to which it ran. There was a Pohutukawa tree behind landing "D". Cause of the fracture at landing "D"; i.e. the highest landing: I consider this fracture peculiar insofar as there appeared to be no visible means of support of the upper portion of the wall containing the drains, so I conclude there must be some form of arching action taking place due to the extreme length of this fracture

also due to acute steepness running up the slope. If the effective cause of the 3" gap at Landing "C" were the protruding tree roots would you expect a gap to appear at the very top of Landing "D"? No.. That's what puzzled me. I couldn't see how roots and Landing "C", where the crack seemed pretty full of roots, could lift the wall up at top of Landing "D" - many feet away. Could you see signs to indicate that roots from highest trees were causing the fracture in Landing "D" to remain open? It was very clear that roots from that particular tree weren't doing it. There was clear gap of at least 1½" with nothing in it at all. What inference if any, did you, as a Consulting Engineer draw from the fact that this main fracture runs down the wall through the whole of its visible parallel to the top of the wall? There is only one reason and that is that it's a separate piece of wall and always has been. It merely rests on the wall underneath. Cracks inevitably appear in any concrete work. Do you subscribe to that? I don't agree altogether. There are structures in concrete built for many years and are without cracks. As a result of my inspection of this wall I could only say from appearance of the ageing between faces of the concrete - the floor and ceiling of gap - leads me to believe that it is a very old fracture. In fact it was there when the wall was built. HIS HONOUR. Do you refer to the whole fracture? Yes. You don't mean the roots were in it? No. It wasn't always its present size of course. Bearing in mind the opinions you formed about this fracture what would you say if it were suggested that in 1955 all that could be seen was a narrow crack - a slight crack? I'm very amazed if that were said. I can't see how that could be possibly true. Did you notice whether the concrete block was in certain portions of the wall had slightly moved towards Mr.Morgan's property and slightly towards Mrs.Khyatt's? Yes, I recall movement towards Mrs.Khyatt's but not from the other property. I couldn't be sure now exactly where that movement was. Diagram against the mark in Landing "B" on the plan: To the uninitiated observer the appearance is that concrete drainage block has moved very slightly down the hill, what explanation would you give for that? I presume the upper block has moved down hill as well as in the direction normal to the crack. In other words the crack has increased in width and top of wall has moved downwards. I think it went downhill as well - in two movements. In addition to being prised apart the upper block moved slightly downhill. HIS HONOUR. Could that not have been part and parcel of the prising apart? Yes, I presume it would be a simultaneous action - as the whole thing opened it would lose whatever bonding there may have been.. Is bonding used in the same sense as reinforcing? No. Bonding by two rough surfaces rather than any artificial bonding? Yes. Were you able to come to any definite view of actual position of stormwater and sewerage pipe in this block? No, I never did find out which was which. EXHIBIT G. handed to witness: Would you expect that to be the position

HIS HONOUR

HIS HONOUR

of these two drains in that concrete block? That is a probable way it could be built; it is probably correct. One of these drains is at the bottom of concrete block? Yes. Would the method of construction used indicate that it rested on the surface of the concrete wall or would concrete be poured on that surface? The way its drawn here indicates fresh concrete. But I think this diagram is partly a guess. I would expect lower drain to be laid on upper existing surface. The lower drain would be placed on existing wall resting on old concrete then fresh concrete poured on the drain up to the under side of the upper drain. If the drain was laid on surface of the old wall and roots got into the joint between the concrete drainage block and the old wall and forced that drainage block upwards would it necessarily force the drain upwards? Yes, the block of concrete and drain would have to go upwards in one piece. Does that include the drain which is resting on top of old wall? Yes, I would expect them all to rise together. As they rose I wouldn't expect any marked damage to the drain provided the upper portion stayed as one complete whole mass, one would expect finally a fracture at the upper end above Landing "D" and lower end below Landing "A". The pipes in drainage block - provided it is sound and pipes themselves sound - over the length of the drainage block no harm should occur. What would your comment be on a suggestion that the growth of these trees and the growth of the roots would by a slow process move the wall? I would expect the wall would be moved by the trees growing rather slowly. Assuming that has happened, were you able to form any opinion as to when it happened? I do know Pohutukawas are very slow growing on rocky hillsides as I have them on my own place and the wall has been there at least since 1900 and trees are at least as old so I consider the movement has been going on for perhaps 50 years.

CLENDON
CROSS
EXAMINED
KENT
HIS HONOUR

Has the movement in cracks been going on for 50 years? As soon as tree root came against wall they would penetrate crack and movement would be slight. It might take years and years to manifest itself? It would increase every year. HIS HONOUR. When first impact depend on (a) where tree was planted It all depends how far away the trees were planted? They are very close. The growth in first 10 years wouldn't affect the strength of this wall? It could start the movement. A fibrous root even 40 years ago? It would be a thread when it first started. In the first five or six years there's very little growth in a Pohutukawa at all; assuming you're right this microscopic root gets in and affects the drain what happens to contents of drain? I was talking about crack in wall. The roots will slowly fill the drain. What happens to contents? It would block and contents would come out top end of drain. You'd expect that to go on happening because roots would go on growing? You must have a hole in the drain. You clear the roots, then they fill up again? No, if it is cleared and mended

drain correctly the roots wouldn't enter. In order to clear drain he takes concrete to pieces? You cut a hole. Did you notice one vertical fracture in that drain? No, I don't recall that. Did you notice anything that top piece of concrete had been broken up for drain to be repaired? Yes, half way up the wall on Landing "C". You are not sure? No, it's an impression.

(A) we have a concrete wall built in two sections: Having been built this way there is a point of joiner where top section is added to the first? Yes. 10

(B) we have Pohutukawa trees growing - in some strength now - alongside that concrete wall? Yes.

(C) having seen the trees would you agree the trunks would exert considerable pressure on concrete structure? Yes, they must do that.

When exerting pressure, the structure will give way at a certain point when resistance is broken down? Yes. Then you expect crack in wall particularly at point of weakness? Yes. Once that crack manifested itself wherever it was, the trees in immediate proximity you would expect the roots to make for that area? Yes, roots do seem always to penetrate crack. A crack in concrete wall or concrete path in themselves don't indicate lack of stability? It depends on type and position of crack of course. Many concrete structures will crack? Yes. This particular wall was not intended to carry any particular weight - its not holding up a loose bank? Yes, I would think it was poured against a rock face. Pressure against it is not of any consequence? It would be a consequence but there's not much pressure. One would hope there wouldn't be much pressure behind wall. Part of it is rock but sound? I didn't see much of rotten rock but I presume it is alright. Orcheston has said for purpose for which it was originally built it was quite alright, supporting a drain and providing a concrete wall? I don't agree with that statement. HIS HONOUR. What was wrong with it? They attempted to join top and bottom and weakness was left. Assuming nothing happened to it what was wrong with it - and assuming there were no trees there? It seems to me its lasted 50 years and perhaps that's all it was built for because all sections have growth. If you owned a piece of land with concrete dividing wall and a drainage system apertant thereto would you be happy to have four or five Pohutukawa trees near your drainage? No. We can see what roots of these trees will do? That's well known. That's what has happened here? Yes. I think the top should have been bonded from the top. They didn't do it in those days? I think you'll find they were. Reinforcing steel was used in those days. It was built according to practice of those days? I don't think it ever was a practice. Assuming this happened that the persons laid the drains on earth - there was a bank there it wouldn't have been so unique then? That would be normal way. And concrete over the top - encase it? That was only done when bank was very steep. That would be prudent practice? If drain had been laid in trench and then 40 50

HIS HONOUR

concrete it would probably be alright today. Either it was laid for decorative or other purposes made a path cut out the earth under the drain and filled that in with concrete would that not explain the structure we see today? No. That fracture running the length of wall is now occupied by roots of various sizes from Landing "A" to "D"? Yes. The main infestation of roots is at Landing "C" 3 to 4" thick? Yes. Landing "C" immediately adjacent to one of the large Pohutukawa trees growing on boundary? Yes. There is no similar tree at Landing "A"? No. At Landing "D" 10 you can see no evidence of roots coming from immediate vicinity of Landing "D"? I didn't say that. You could see roots in the wall - did they come from the trees? Yes, they appeared to be Pohutukawa roots. Doesn't that really suggest initial penetration came in area of Landing "C"? Yes, it would appear they have been there longer in "C". Once you get penetration in "C" - and not so advanced in any other point - you have that part of the wall adjacent to "C" being pushed up higher, faster, than the other parts? 20 Yes, it would obviously rise. That would give a buckling affect? Yes, it must of course. If you get that affect in concrete drainage block it must affect what is inside? Not necessarily it depends on degree of buckling. Sufficient buckling would crack the whole structure. If that happened sewerage or water was released you could expect roots to grow at accelerated rate? They would thrive better with more moisture. Direction roots would take - they don't grow through wall and on to Mr.Morgan's - they have followed contour of fracture? Yes, run down fracture. And run up and down that crack? They have kept within the crack. The 30 gaps at each end are narrower than where initial penetration took place? That could well be. You have Morgan's side of boundary line? Not thoroughly. I did glance along. The roots are in the wall - how own land must be affected by similar roots? His land will have roots. In concrete structure he may have roots. Is that a wise state of affairs to have his structure near these roots? Its unfortunate place to have a drain. Is there a grave risk to his drainage system? I would say if his system had any defect he would be under grave risk and blockage. Even a 40 mild earthquake can cause slight fracture in a wall? It would have to be more than mild - a significant earthquake. Pipes themselves have very minute flaws and fracture but calcium in water causes them to be of no significance? A sewer drain is not supposed to have any defects. If they leak they are condemned so I don't agree. They must be rectified because roots have been known to penetrate drains with defects. If something is not done to these trees can we expect an aggravation of the present position and with possibility of present wall being completely undermined? 50 If the trees keep growing the wall could be pushed further out of line. Disintegration might set in in several ways? Yes.

CLENDON
RE-EXAMINED
BARTON

There comes a certain point when resistance of a wall to pressure of roots is broken? Yes, that generally takes place at a certain point. With respect to this particular wall on Mrs. Khyatt's property would you have expected that resistance to have been broken before or after 1954? A wall of this type would have practically no resistance - its very very weak. It is impossible to say what point of time that wall would break and from what particular cause. The longitudinal crack was broken the day it was built. Is it impossible for anybody to assist in determining when this resistance for pressure was broken? I can't say. I would suggest that the wall would withstand very little pressure at any time at all - it never did have any strength. If this concrete drainage block had been laid in accordance with proper standards pertaining at the time and there were no crack between it and the lower portion of the wall, do you consider that the trees, in particular the roots, would have protruded into drainage pipes? I feel quite certain if there were no defects there would be no root penetration. I've never seen roots of any kind penetrate solid concrete. 10

CLENDON
REPLIES TO
HIS HONOUR

HIS HONOUR. Your view is that this wall not being of strong construction wouldn't have stood up to pressure at any time? Its just the bank that is holding it up really. Damage now present in wall as a result of root pressure on your theory must have been of recent development? No, I consider long standing development - roots have been in wall for many years. If continuous pressure the wall wouldn't have stood up? It has lifted. The top part of the wall lifted at a very early stage? I meant very faintest lift in the beginning. Is it to be denied that construction of this wall was similar to many thousands of walls in N.Z.? There are many of this kind in Wellington built about the same time and I don't think you'll find any without damage. There are concrete structures that stand up to 50 or 60 years without any cracking? Yes, it's probably a wall of some thickness or weight, but not a thin type like this. You thought this wall only had a life of some 50 or 60 years? That's my view of that type - temperature everything - after 60 years one must expect fair degree of deterioration. Its still strong to stand the cast iron pipes affixed to it? I wouldn't have done it like that at all. At the moment it appears to be holding them? Yes. Do you disagree with opinion that if this process of root pressure continues unabated the wall may eventually topple over? Continuing movement will take place if roots are left. And render it unserviceable in time? Yes. Is it your view that this condition of this wall would necessarily have been what it is today if we hadn't had this picture of root pressure etc.? I think the crack is much bigger than one would normally have without roots - but that would have been a crack even without roots present - there would have been other sundry cracks. Top of wall wouldn't have lifted? A crack of that 30 40 50

nature over years - any movement dust gets in it - it gets worse - I would have expected 1 1/4" in that but not 4". Is it essential component of your theory this crack developed at or about the time the wall was built? I say it was always there - a wall was built and other concrete was placed on it. Has it existed virtually from the time the wall was built? Yes, that is my theory. Would have been as obvious as it is today except for greater depth in some places owing to root intrusion? Yes. It would have been perfectly obvious to a purchaser in 1955? It must have been. 10
 On your theory you've got to attach little importance to intrusion of root growth into cracks? Except the cracks have been enlarged by the growth. The result might have been arrived at today even if there hadn't been any growth? Some. Would that include the breaking of pipes? In some places - in 1942 the earthquake could have cracked the pipe. You don't eliminate the theory the growing roots could have cracked the pipes? I would expect the only cracks would be at bottom. What about Landing "C"? Its gradual slope - it would be gradual arc and little if any damage. In no 20
 portion of wall would the intrusion of roots and growing of roots have been cause of cracking of pipes? Its possible idea that the roots got into the pipes through a defect in the wall. We must discount the theory that pressure of roots on the wall led to the cracks of pipes? We need not necessarily assume the crack was caused by roots - its a possible theory but not certain. Is it more or less certain by your theory? I've seen a lot of pipes with lots of roots and we've always assumed a defect in the pipe. Council are most about pressure testing pipes in sewer. If your theory 30
 is correct every time the drains went out of order you'd have to do some replacement? They should be repaired carefully and completely sealed with solid concrete. If this crack remained and the movement caused by earth tremors etc. would you not expect a history of repairs? Yes, I would expect there to have been a lot of repairs.

STERLING
 FURTHER
 CROSS
 EXAMINED
 KENT

MR. STERLING BEING FURTHER CROSS EXAMINED. The minute seed associated with Pohutukawa trees compared them to dust, being as small as that it could get into all sorts of minute 40
 crevasses, cracks, rocky faces? Yes. If it gets into those it germinates? Yes. It can gradually open up crack or rock face until there is quite a big crack in the rock? Yes, provided conditions are right for germination. Aerial roots: As they come down from the tree branches do they also go in search of moisture? Yes - they can either grow from the soil; they can be scambler - germinate on a post and come down. Is end of that root minute? No, its a little block - the aerial usually finishes with a little point - that's the live portion. 50
 What happens when that aerial root strikes water or earth? It normally doesn't grow further shoots. It increases in thickness. In some cases - on Morgan's side they have developed to as thick as my arm. These have originated from the heavy base of the branch. HIS HONOUR. These are

HIS HONOUR

the roots sought after by boat builders? Yes. They have to be strong? Yes. Do they make for water? I don't think to same extent because they hang in the air - not until they move along the soil. Nature would give them instinct to go for moisture, Did you see any there obviously aerial roots - found in the wall? No. There are aerial roots in vicinity? Yes, a lot.

STERLING
RE-EXAMINED
BARTON

Assume that with the gradual growth of Pohutukawa trees in this case and the growth of the trunk and the growth of very fine hair roots in cracks when would you expect any displacement to take place in this wall? Would you have expected displacement to take place before 1954? I think the trees are at least 50 years old. They were planted out when quite small. In first two years they don't make much growth - the next 15 years growth is rapid and then in each year it gets slower. Root action is fairly strong - they are strong seekers for moisture. Root system would be well established in 20 years. They could be in that drain for 20 years before they would do any damage before they would restrict the flow in it. They take a long time to grow inside the drain. The damage was done to wall and drain quite a number of years ago - at least 10 to 20 years. There would be strong root system there 20 years ago almost as strong as it is visible today.

STERLING
REPLIES TO
HIS HONOUR

You don't mean that the intrusion of the roots had broken the drains and made them unserviceable 20 years ago? No intrusion had laid foundation - 20 years ago - from which present situation has developed? Yes. As part and parcel of development roots have grown stronger and exerted more pressure over these years? Definitely. If nothing is done to arrest progress now ultimate result may be to render the wall completely unserviceable? Yes, it will crack the wall - perhaps push it right over - then the root system could keep it hanging. Particularly if weight of cast iron pipes on one side would give impetus? Yes. Would you be prepared to guess what stage would be reached before the wall would topple over and be rendered unserviceable as a wall? No. This seems to have arisen from planting of the trees too close to the wall? They are only inches from the wall - just inside the wall. That's what makes me think they've had struggle. They were there first - that's what I think and drain and wall followed them, because I shifted Pohutukawas over 200 of them in 1940 to the Exhibition buildings at Rongotai. These trees were much smaller in branch than these ones and they were 40 years old. They didn't have the root system visible of these trees so I consider these trees much older. The trees were there before wall constructed, wouldn't that equally apply to wall on Morgan's property? Yes. What applies to one wall applies to the other wall? Yes. It's a pure matter of speculation as to whether the wall or trees were there first? Yes. If it's clear if we're to preserve the wall the trees have got to go? Yes. Will the roots have to go?

Once the trees are cut out the roots will gradually die - they won't get bigger or longer. If trees were removed can the roots cut up to the wall - would the main danger to the wall disappear? If the trees are killed. These roots won't live from a root. Some trees when you cut them the roots won't grow. Would the removal of trees and the cutting of the roots be sufficient to arrest any further damage, would that be expensive process? Quite big. The digging out would be more than half length of Court table. Who would you engage for that work? Contractor. Then again you have the trees that near the wall, you will damage wall and drainage system in getting the trees out. When you say you damage drainage system do you mean such of drainage system as now remains in the pipes? Yes, I think cast iron drains they are above ground level. Work would have to be done from south side - Morgan's side - I think there would be damage done - surely - to the wall and to the bank in removing of trees - both walls. What cost would be involved? Machinery couldn't do much - it would be hand work. Perhaps a chainsaw but the greater part would be hand work. Men in the Parks & Reserves would do that? No, but perhaps 15 years they would look at that work. Gardeners employed don't do much hand work; who would one employ? Contractors do that type of landscape work in the city. It will be hand job. It could be quite costly. Its not straightforward. Would it cost £50 or £500? It could be priced. Is that the only suggestion you have of putting - assuming plaintiff was entitled to some remedy - is this the only way you could put her mind at rest as to future of this wall? Every year it will get worse - the roots will get stronger. Some of these roots are higher than the trees? The trees have been cut back - also there are power wires - they are back to height of 12'. You don't suggest the roots have got to be followed and lifted. If you moved the tree? Yes. There wouldn't be resulting damage to wall if that were done? No. It would be laborious work.

GANDAR
WITNESS FOR
DEFENDANT

Calls ROSS MAXWELL GANDAR. Member of firm Max Gandar & Son. practising as registered surveyor. I am not a registered civil engineer. My firm practice as surveyors. On instruction I have prepared a plan of the wall between the two properties. As a result of my inspection of property I prepared this plan. Handwriting on the plan is mine - I prepared the whole of the plan. Comments are based upon actual observation of the site. In course of preparing this plan I had previously done a Land Transfer survey of the property. It was some months prior to preparation of this plan. In course of that work I had occasion to refer to a plan prepared by Mr. Hannifey and occasion to refer to deposited plan in L.T.O. I arrived at certain conclusions about position of boundary and the original D.P. Strictly speaking there was no D.P. of Mr. Morgan's property. I found that the boundaries shown on Mr. Morgan's title were incorrect and further discrepancies were found. Further other discrepancies demanded a LT plan

of Morgan's property even though the property was not being subdivided somewhat in the nature of an application for the removal of limitations as to parcels. On my plan there is a line which represents in my opinion what is true boundary. The plan of my survey has now been deposited and that boundary corresponds with this plan. HIS HONOUR. The wall which is substance of complaint was entirely on plaintiff's property? Yes. Some portion of Morgan's wall is on her property? Yes. Some portion of her roots are on Morgan's property? No Sir. Where does true boundary line run? At the top there is 3" clear gradually running down to on boundary at the bottom. HIS HONOUR. The nearest points of Pohutukawa trees to these particular boundaries? The top tree is 1' clear of the boundary. I must state that the back edge of plaintiff's wall is irregular and it would be hard to say exactly to within more than inches. Is that one foot clear from the wall? A fraction more. The next tree is 18" clear; the next is 1' clear; and the last one one foot. In between trees and Mrs.Khyatt's all there runs concrete structure in which Morgan's drainage system is contained. Is no part of Morgan's concrete wall on Mrs.Khyatt's property? That is the contention hard to sustain. Back of plaintiff 's wall is irregular - Mr.Morgan's drains were not visible to me.

GANDAR CROSS
EXAMINED
KENT NO QUESTIONS.

GANDAR REPLIES TO HIS HONOUR To all practical purposes would it be proper to say that Morgan's trees virtually grow up to the boundary? They grow over his own drainage structures, yes.

THOMAS WITNESS FOR DEFENDANT Calls NORMAN ALEXANDER THOMAS. I live at 22 Miramira Road Normandale, Lower Hutt. I am in business as a general contractor. I employ a number of workmen - 31. I carry on business under the name of N.A.Thomas & Co. On instructions I have examined the wall between the two properties at 314 - 316 Oriental Parade for specific purpose of giving an estimate of cost of repairing the present condition of wall and drainage system; i.e. Mrs.Khyatt's drainage system. I am familiar with the two properties. In my view reasonable work necessary to repair: To remove the concrete top and replace with pipes is the work I priced on. This would remove the loose top and rectify the drainage trouble. While the top was removed the roots would be cut back. This is the kind of work that I do in my business. It is quite a lot smaller than normal. I have a drainlayer employed. The removal of the concrete drainage block it is approximately 4 yards and I allowed approximately £120. They are cubic measurements. I also allowed for laying of a twin course of cast iron pipes approximately 85' in length at 12/- per ft. of pipe. Plus connection at both ends I allowed £150 for that item. When

HIS HONOUR

I examined the property the pipes were just the normal type of pipes. Were cast iron pipes in position on the wall? No. HIS HONOUR. Why would you discard the existing pipes? I made my estimate last year. As the roots will have to be removed they would have to be poisoned. My firm doesn't normally take on this type of work if we could avoid it. You would cost this work as a costing job or put in a high price as it would be a costly operation. Apart from removal of roots - or poisoning of roots - my estimate is a total of £270.

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THOMAS
CROSS
EXAMINED
KENT

How long have you been in this business? 2½ years. How many jobs have you done as a drainlayer? It is mostly sub-contract work. What does cast iron pipe cost per ft.? About 6/-. When were you asked to price this job first? Early last year. March 1960? It would be about that time. Did you give your price to Mr. Morgan? Yes. On 16 March 1960 we wrote to Mr. Morgan in these terms.... "When we last wrote serious". As far as I remember all I was asked to do was to give a price. You have to remove a concrete block 85' long and remove the drainage system inside, remove roots, take away spoil, cart it and dump it? Yes. You have to lay 85' of cast iron drain - top to bottom - all connections and redress top of wall to make it look even? No, the pipes would be left exposed. You would take off block entirely, lay the cast iron pipes on top of old base - the old retaining wall? Yes. Then do you dress that up? If the wall was uneven you would. That would be all that would be done. To give it an even appearance - £270? Yes. All that for £270 - you are quite serious about that? Yes. An experienced drainlayer removing roots and reconstructing drains £300? I have had various drainlayers estimates that differ 50% from each other. £198 for stormwater drains etc. whom do you employ? He charges 10/- a foot for laying cast iron pipes, supplying and laying is a registered drainlayer and has been for some time. You propose to have this work done by subletting the contract? If it came up now I would do it with my own man. When did Sinclair inspect the site? He gave me a quote about two days after I inspected it. Did he inspect it with you? No. Do you agree this is a very unusual section? Yes. It would be very important for a drainlayer giving a price to have regard to the unusual nature of section? Yes. The pipes would have to be fixed into position? Yes. How did you propose to fix them? You have them with a lug already built on them I'm sure I would make a reasonable amount of money out of it at that price. Did you know anything of this estimate when you gave yours? Nothing whatsoever. What experience have you had as a drainlayer? Very little. From your experience of 2½ years general contracting; you rely on your estimate from Sinclair; do you know if he has seen the property? I would say he has. I haven't seen him there. At the time you got this estimate you'd been in business for 18 months? Yes. How old are you? 24.

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COURT RESUMED 27 April 1961.

Mr. Barton calls the defendant:

DEFENDANT'S
EVIDENCE
BARTON.

CHARLES MORGAN. I live at 314 Oriental Parade and I am the defendant in this action. I have lived at that address since 1939. The Pohutukawa trees were growing substantially at that time as they now exist. Since my occupancy of 314 Oriental Parade throughout the years odd branches have been cut off when they appeared to be growing too far into the other property. For common sense reasons one kept the growth under control. When I bought the property at 314 the then owner at 316 was Mr. Livingstone. He died and his widow became the owner. I think his widow was always the owner. On Mrs. Livingstone's death the Public Trustee administered her estate. In 1955 Mrs. Khyatt purchased the property - very early in 1955. Before Mrs. Khyatt purchased the property I was very familiar with the property. I had a lease of the property in 1944 for four or five months. I was very glad to let the lease go.

HIS HONOUR. Lease of ground? A lease of the property and it was for a business venture. My lease was for the whole of the property of 316. I frequently went on to the property and at that period very frequently. In effect I was always visiting Mr. Livingstone and we were very friendly. Mr. Livingstone died in 1956 - perhaps late in that year. Mr. Livingstone died 7 or 8 months before Mrs. Livingstone and that was a year to 15 months before the property was sold, so that was some time in 1952 or 1953. From my knowledge of the property at 316 the state of the wall when Mrs. Khyatt purchased was extensively damaged. Considerable root growth was clearly visible. I reviewed the property myself with a view to purchase just prior to the new owner taking over, viz. Mrs. Khyatt. I had discussions with the Public Trust about the purchase and the price. I knew too much of the defects of the property and defects to the wall and the drainage system - they were only one part of the problems. These deterred me from purchasing. I didn't raise with an officer from the P.T.O. the state of the wall as I had no occasion to do so. I was in Court when Mrs. Khyatt gave evidence. I heard her evidence about her visit to the property with either her father or mother before she purchased and that all she saw was a slight crack where the longitudinal fracture is now to be seen. I would say that the fracture was so prominent that an observant person could not possibly have overlooked it. I've heard evidence of various expert witnesses about exact width of this fracture in 1960 or even 1961. Since 1955 I would say there has been - or there was - no material difference even over the past 10 years of the width of the fracture. Of recent times of course the wall has been inspected, little bits moved round, parts pulled off. Its present condition is not natural development. I observed the existence of substantial root growth in the fracture today and for many

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years I have been acquainted with it. It has been much the same for many years. When Mrs.Khyatt purchased the property she definitely had discussion with me about the state of her property. That discussion didn't touch particularly about the state of the wall. It was a general discussion. That would have been within the first three or four weeks after the purchase of the property. Mrs.Khyatt mentioned the state of the trees shortly after another dispute had arisen with the lady - the dispute about the fence that she had removed. This incident would probably - I might be guessing - may have been about September 1955. It was in July she removed and demolished the fence. The discussion took place in September Well I didn't have much discussion with the lady about incidents - it was more likely statements to me. From these statements I understood her attitude to be that I must remove the trees. Her reason I gathered was that she didn't like them. She didn't say specifically why she didn't like them. I have heard evidence about a conversation where I made a remark that I was a tree lover. Her evidence was not relating to this conversation I have just been describing. That remark arose from an earlier letter I had sent to her solicitors answering a complaint respecting the trees. I heard Mrs.Khyatt say she didn't like the accumulation of leaves from the trees. I believe there was a conversation when she expressed that view. Mrs.Khyatt didn't, in the early stages, complain about the roots. My attitude to suggestion that trees should be removed was that I could not see any sensible reason for her attitude. The trees were a substantial part of my approach. They couldn't be removed easily and certainly not without doing considerable damage to my access and it is my only access. It would have meant considerable trouble for me, dangers of slipping, excessive water running off; all the problems that come with unstable country. It seemed to me that her reason had no other purpose than to facilitate the continuing usage of a drainage system that I knew to be defective. The ground for my view; I have known the property for many years. I have had personally to handle problems of defective drainage in Mrs.Khyatt's property. When Mr.Livingstone was alive we were very very close friends and these matters never caused any friction. We looked after our own problems, assisted one another, never had occasion for any dispute. I knew there had been trouble with drainage system at 316 Oriental Parade and I believe Mrs.Khyatt knew it. I was about to say that there was legal trouble with Mrs.Livingstone. I was very conscious of my obligations regarding further root intrusion but I could not see how to achieve anything effectively without her co-operation. The drainage was defective. Had she repaired it it would have facilitated the removal of any root growth and would have ensured no further trouble. This, of course, is for the drains - no further trouble with the drains. The drainage block was another matter which did not seem to me vital as between neighbours. It was a qtn

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of live and let live. There appeared perfect stability that the area anything that was to happen had long since happened, and I couldn't see any effective way of removing the roots without upsetting the whole equilibrium of the area involved. Mrs.Khyatt's only solution was to destroy the trees. I took steps to cut the branches of the trees back. It was obvious to me that I would severely restrict the trees, and I did cut them back a lot more than I would have previously done so. The first part I did myself, then in May 1959 I employed a young Dutch lad, named Bevers and instructed him to remove all growth overhanging Mrs.Khyatt's side. He cut back the two top ones completely, some of the third but he did not cut the lower tree. I originally instructed him to cut all the trees. Unfortunately he dropped a small branch on Mrs.Khyatt's approach at a time when Mrs.Khyatt saw him and he received such a tongue lashing... however he didn't finish the work on the lower tree. Later in the year I had a Mr.Madden working on the property; his purpose originally was to tidy up my whole approach. I had in mind to do the fourth tree - the one left by Bevers. He didn't work on this lower tree. Since then the trees haven't been touched by anyone because there was the Court action. The documents in connection with the action in the Magistrate's Court - I knew nothing about the matter. Between the trees on my property and Mrs.Khyatt's wall there is my own concrete structure. I listened yesterday to remarks about pressure from the tree trunks but obviously that pressure if it does exist must be against my own drainage block. It would need tremendous pressure to pass my drainage block and be conveyed to Mrs.Khyatt, particularly as much of Mrs.Khyatt's drainage is above the level of mine. I think my own drainage would collapse at the point of stress before it could effect Mrs.Khyatt's drainage in the way the evidence was tendered. Since I have been in occupation of 314 Oriental Parade - since 1939 - there has not been a collapse of the drain containing my concrete structure. It has been said by Mr.Orcheston that my drainage is of superior construction. All people with drains and with trees have trouble with root growth in drains. I have had trouble but it has been a minimum of trouble because I have always appreciated the necessity of periodical maintenance. The accepted form is to have your drainlayer run his cleaning rods through the drains at sensible intervals. There is another quite simple and effective method - copper sulphate added to the flushing water periodically will restrict the growth. I have employed both remedies. I have employed these remedies throughout the whole period, although of recent times my maintenance has been more consistent, but that is mainly through having a difficult neighbour I didn't want to take any chances. During the whole period of occupancy there have been no natural breakages in my concrete structure; one only deliberate break for cleaning purposes, that is just below the first tree coming up the path. A person

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Making an inspection of my property could see that breakage
 if he were familiar with what patches of concrete mean on
 the drainage system. At one portion of the concrete
 structure on my property there are newish drainage pipes.
 These were installed shortly after Mrs.Khyatt bought her
 property. That replaced only that particular portion of
 my drainage system. Lower down on my property there is
 an aperture in a pipe large enough to contain a hand.
 That is the stormwater drainage. There are roots growing
 into that. I haven't had any breakages in drainage due to
 stormwater. I think the history of the aperture is before I
 took over the property. I had a cleaning eye put in low
 down about half way down my access track, the other work
 I never authorised myself. It was just done and the bill
 sent to me. I did not employ the drainlayer and did not know
 it was being done. I had authorised some work. The
 explanation given to me was that it had been done in error.
 HIS HONOUR. By a drainlayer employed by witness? No, by
 a drainlayer employed by my neighbour. I paid the account.
 For the work that was not authorised by you? Yes. I paid
 something over £20. I couldn't find the receipt now. The
 cleaning eye is the aperture through which the cleaning
 rod is inserted into pipe. There are no cleaning eyes in
 Mrs.Khyatt's drainage. Their drainage came to a drainage
 box - I think it would be called - about half way along
 south side of the house. That was in Mr.Livingstone's
 time. There was a concrete slab covering the which was
 removed for access. That was on the level above the
 drainage block. Along the whole of the drainage block there
 were no cleaning eyes. Recently cast iron pipes have been
 installed on Mrs.Khyatt's wall. I have no reason to believe
 the trees will cause trouble to those pipes. If the drainage
 block were to be removed I think it would remove all of the
 root growth that has been the cause of this action. Any
 other roots must be well underground and contributing to
 the stability of that area. I accept I received the letters
 mentioned by Mr.Kent that were written to me. I accept the
 fact that Mr.Kent gave me an indication of the cost of
 certain work as a result of an estimate he had received -
 letter 16 March 1960. I heard Mr.Thomas's evidence
 yesterday. I instructed Thomas to give me an estimate
 approx. at the time I received that letter. I heard Mr.Thomas
 say he didn't know when he gave me an estimate of Mr.Davis's
 estimate. Mr.Davis has only done part of the work. He has
 not done the wall and its repairs. Mr.Thomas suggested a
 method both economic and sensible of completely covering all
 controversy with my neighbour. This estimate involves all
 the work. I have no reason to believe his estimate is low.
 You could do that work at this time for that figure. I
 have had dealings with him before. I did not indicate to
 Mrs.Khyatt's advisors I had the estimate of Mr.Thomas.
 When the action was started - which I understood was what
 I had to do - I understood the purpose was to call evidence
 from Mr.Thomas not to challenge by letter. (LETTER 16 MARCH

HIS HONOUR

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1960 HANDED TO WITNESS) EXHIBIT E. It was about the time of this letter that I got Mr. Thomas to inspect. This letter was followed by another claiming a lesser amount - letter of 11 May 1960. EXHIBIT NO.3. My understanding is that I was getting evidence for possible Court action. I acknowledged this letter disclaiming any responsibility, on the grounds that the damage had existed for many years prior to Mrs. Khyatt purchasing. This next letter was written before 16 March 1960. I understood it was for Court action evidence that this estimate was so hopelessly excessive, that I got this. I've heard Mrs. Khyatt's evidence that it was not until 1958 that she became aware for the first time even where the drainage system was on her property, and I was very shocked. Before 1958 I had had numerous letters complaining about the roots etc. In 1956 I had litigation with Mrs. Khyatt in connection with wall and hedge on the top of the property. In the course of that litigation there was correspondence between Mrs. Khyatt's solicitor and my solicitors. That correspondence contained a letter of 24 May 1956 written by Mr. A. B. Sievwright to my solicitors Messrs. Duncan Matthews & Taylor. "With reference to my telephone damage". Letter 28 May 1956: "re Khyatt & Morgan trees". 31 May 1956: "..... survey plan fence convenient date". In the letter of 24 May 1956 Mr. Sievwright refers to a "fencing notice". That was addressed to me as the occupier of the residential property at 314 Oriental Parade. I think that letter came through registered post. Even when Mrs. Livingstone was alive there had been letters from lawyers then. Letter 12 May 1952 (read to Court) I was on very friendly terms with Mr. Livingstone. Mrs. Livingstone was friendly but not intimately as I was with Mr. Livingstone.

EXHIBIT NO.4 - SERIES OF LETTERS.

I received letter of 12 May 1952. As a result to comply with request contained in it - it was then ancient damage even at that time - although I offered to meet Mrs. Livingstone in the matter it was purely as a neighbour and not because there was any liability on me to do so. I think it probable I paid half the cost. I don't have any recollection of paying either half or the full amount. I think the matter was just dropped as it was not pursued further. Mr. Livingstone passed away months before Mrs. Livingstone. Mrs. Livingstone went on a trip to England and passed away on that trip. She didn't come back to New Zealand. This letter was written when Mrs. Livingstone was a widow. I was not called on to take any action by removing roots of the trees. With respect to the fencing notice there were proceedings in the Magistrate's Court. I understood Mr. Sievwright put a case down for hearing. He failed to appear and the case was struck out. I gave evidence in certain proceedings in the Magistrate's Court in 1956. The wall and the fracture running down it: I understood Mr. Sievwright wanted his case reinstated. My

lawyer thought that the second part being already the subject of a separate action it wasn't sensible and I don't think Mr. Sievwright did reinstate that. The Magistrate's Court didn't come to any judgement in the matter No.1 in the fencing notice. The fencing notice refers to a distance of 42 or 44' from Oriental Parade boundary. 44'3" from Oriental Bay frontage. From that distance up to Mrs. Khyatt's house in 1956 there were two drains encased in concrete. I don't know of any other drains.

DEFENDANT
CROSS
EXAMINED
KENT

Mrs. Khyatt did not complain about the roots in the early stage of her occupancy, but in 1958 she did complain? 1956 she did. In early stages of her occupancy was there trouble - in connection with drain - at top of section? Not as far as I'm aware. Was there trouble with a drain on your side of the dividing line at the top of concrete wall? Not as far as I know. Did you say there had been no real growth of these roots over past 10 years? Hardly notice the growth. You've heard the evidence given by experts in this case? I have. You can expect quite phenomenal growth from Pohutukawa roots? I heard evidence that their phenomenal growth would be in first 20 years. Did you not hear that once the roots got access to water or drainage they could be expected to grow? Not experts. Mr. Sterling's evidence: p.94 "What happens..earth.. thickness." p.131 "The presencepipe....cracked." That is common sense. Accelerated growth is common sense. Do you agree with accelerated growth? Naturally. Do you agree as a matter of common sense that when the roots strike moisture or sewerage the growth of them would be accelerated? Yes. You had trouble since 1952? Yes. What did you do with regard to that complaint? I have explained. Did you do anything? No. In 1958 you had further complaints through correspondence from my firm? Yes. You did nothing about that? There was nothing to do. Since then you've had further complaints? Not justified. On each occasion there was complaint with regard to penetration of roots either into concrete wall or drains? Yes, that my drains were causing nuisance. Its the protrusion of roots that is complained of? There were complaints of my drains. Have you had complaints with regard to the roots on several occasions? Following those particular incidents yes. Were there roots in the wall or drains? No. Why do you say no? They had been there before I was owner of property. You were therefore justified in allowing this growth to go on? No. If you did nothing the growth would go on? Yes. What did you do? Nothing. Was that your attitude in 1958 that you were going to do nothing about it? Nothing could be done. Is it your attitude that without an Order of the Court you are going to allow this growth to go on? I was prepared for any arbitrator.. I will be prepared to abide by an arbitrator. There's no drainage to be interfered with. There's no problem at all. What about this wall? It doesn't exist. P. 54 Mr. Orcheston's evidence: "Personally...L22...." You don't subscribe to that?

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No. P.63 L45 line "Assuming that the rootsresult."
 "What you say about cracks.....both." You don't
 accept that? No. P.77 L52 Mr.Morrison "If these trees
 were built.....power of roots." "I understood.....
 same area." "Short of.....carry on." "You have to
 stop the process.....disintegration." I don't agree with
 that. P.87 Mr.Sterling: "Mr.Morgan's own.....danger? Yes."
 Do you accept that witness? Within bounds. P.92, line 33
 "The roots are in the wall....drain." Do you agree with that?
 Its unfortunate for some people. In view of those troubles 10
 that are prophesised you are not prepared to revise your
 own opinion? You can't remove those trees without demolishing
 my access path. But you will have continual history of
 trouble? Not necessarily. You've had trouble there on
 your own section? Very little. You've had to renew portion
 of your drains? Yes. There is an earthenware pipe which
 shows evidence of roots? Yes. You've had this advice
 from Mr.Clendon and others? I have a practical handling
 of the situation. Do you place that over their expert
 knowledge? I know the problem. When the problem becomes 20
 concern to a neighbour that neighbour has another point
 of view? Yes. Did you know these roots are as far down
 as the garage? I doubt if they're Pohutukawa trees. If
 in fact the Pohutukawas have got down that far don't you
 think you'll have trouble with the neighbours in front?
 Very improbable. Mrs.Khyatt complained in 1956 about
 the trees? Yes. She didn't mention the roots just the
 leaves? Yes. Did you promise to do something about it? No.
 I said then as I say now its all ancient history. And it
 can go on? I'll co-operate at any time. You suggested 30
 this that (a) she should have some regular process of
 clearing her drains by insertion of this instrument? Yes.
 That the drainage block should be discarded? Yes. You
 suggest co-operation on her part? Yes. What co-operation
 are you offering? Mrs.Khyatt has been adamant that the trees
 must go. I offer no co-operation with such an attitude.
 You have offered nothing? I've had no opportunity. What
 co-operation do you offer? None, not with such an attitude.
 You suggest Mrs.Khyatt should remove the drainage block and
 clear roots from time to time? There is now a new drainage 40
 block, no roots and no probability of roots. Concrete
 wall there? It's only a plaster surface. It's built
 upside down. There is a concrete structure? Plaster
 structure. It is there? Yes. With the whole line of
 drains attached? Yes. What happens if as a result of action
 of these roots the wall was to topple or disintegrate?
 That wall was in danger of falling down - that was your claim.
 I was not consulted. There's nothing I can do about it.
 That drainage is already out of line. Is the wall on her
 own property? Yes. Do you think she's entitled to retain 50
 it? Yes. Do you think that the wall should be disintegrated
 from roots from your property? If it was being done it
 would be wrong. Earthenware pipes were installed. At
 that point of time do you agree the drain had become

unserviceable? I heard Davis give evidence that he had cleared that drainage five times, I think it was , and it wasn't clearable any more. I would say that is nonsense from my own practical experience. You were advised on 4 August 1958 that a serious situation was developing in the drain? Yes. Followed up by a further letter on 7 October 1959? That letter was not true in substance. You received these letters? Yes. On 16 March 1960 you got another letter? Yes. So that in effect you had had complaints in writing - three of them - from 1958 prior to this work being done in 1961? You had my replies. Your reply? My replies. 10 October is your reply? I would reply to all. Are you suggesting my firm got letters that are not produced? I replied. My solicitors would have replied. You don't complain you were not kept fully informed? You advised me. You made one reply and you left it at that? No, I replied. Can you produce any other letter? I can't at the moment. Over that period you contented yourself with that reply and you took no steps? No. There were none to take.

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(Allegation is not pursued that plaintiff abated the nuisance or that she failed to abate the nuisance)
Page 20 lines 15 to 19 of Statement of Defence no longer being pursued.

What is the future so far as you are concerned with regard to these trees? I can keep them under control as I have done and I fully expect to keep growth under control in the future. The roots as far as they intrude on Mrs.Khyatt's side are not accessible to me. You don't propose to do anything about those? I can't touch them without making the whole drainage block unstable. Are you prepared to cut a swathe round the roots and remove the trees? It isn't possible to cut into the embankment itself without creating problems not only for myself and my access path which is vital but also problems on Mrs.Khyatt's side which are not vital but from appearances. Mrs.Khyatt asks for it to be done - are you prepared to cut swathe and remove the trees? It is not necessary. The answer is No because I do not regard it as being necessary. So far as the value of these properties is concerned you bought yours in 1946? Yes. Stormwater drain - are there roots in that drain? Yes. They are stable now. I don't interfere with them now. That is at the bottom? Yes. You had other damage - what went wrong? Drainage. With roots? Yes. Was that part of the drain encased in concrete? Yes. There is no crack in your concrete? I don't think so. It is obvious the roots have penetrated and got into stormwater drains? Its inevitable. The same process would happen in Mrs.Khyatt's place? It happens in many places. The process has gone on until the drain has become unserviceable? I don't agree with that.

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DEFENDANT
RE-EXAMINED
BARTON

Your attitude to removing the roots and cutting a swathe round the tree and you've indicated your answer; have you any idea of the cost of doing that? The cost is not the factor, its the impracticability of doing it and destroying my access. Have you any idea what the cost might be, also to ensure your access might be preserved? I haven't had quotations.

DEFENDANT
REPLIES TO
HIS HONOUR

HIS HONOUR. In view of the danger you feel to your access and the fact that this root intrusion is a matter of ancient history, you've not given real consideration to the cost of removing the trees and cutting the roots out? I could see a much more economic and practical solution to the difficulty with my neighbour provided she will co-operate. What is the practical solution to avoid the possibility of the intrusion of the roots? The drainage block principally but the wall too - remove the drainage block and all roots can be got at and removed and there is no possibility of the trees further troubling my neighbour at all. There is no possibility of further root intrusion into the wall but that appears to be in conflict? There would be rooting underground that could go into Mrs.Khyatt's side but it is all part of the stability of that hillside. If I might comment the whole problem of stability arises because of excessive excavation on Khyatt's side. 10 20

COURT ADJOURNED 1.0 p.m. 27 April 1961.

COURT RESUMED 28 April 1961.

RESPONDENT
RECALLED
KENT

MR.KENT RECALLS MRS.KHYATT. You have been recalled - do you remember giving evidence on the opening day of this case? Yes. P. of the Notes. "When Mc.C....drains.... were". "That work....1955.56." Did you when you purchased this property know Mr.Sievwright had acted for Mr.Livingstone? No. Had Mr.Sievwright previously acted for you? No. How did you come to go to Mr.Sievwright? It was on reference from my uncle. Did Mr.Sievwright give you any information about location of your drains? No. Did it occur to you to ask him? No. Work done by Mr.Christiesen in connection with drains - where was the work done? Up on the top in the front of the house. It was on the flat portion at the top. That was in connection with the conversion into flats? Yes. Was there some other work done in connection with a drainlayer? Yes, that was Mr.Outram. You heard some work was done to Mr.Morgan's drains for which he received an account? Yes. Mr.Outram repaired the drain at the top near the house. At the time I saw seepage coming on to front path, then I was not sure if it was my drain or Mr.Morgan's drain so I rang Mr.Morgan to tell him about the drain that it had to be repaired but nothing was done until two days and then I rang the plumber, Mr.Outram. Shortly, did he make an examination? Yes. Did he give you advice as to whose drain it was? Yes. Did you pay for that account for the examination? 30 40 50

Yes, I had to pay - it turned out to be a broken drain. At the time I engaged the plumber I didn't know on whose section the drain was. I produce a letter and account from Mr. Outram for the repair of the drain - March 1956. MR. BARTON OBJECTS TO THIS BEING AN EXHIBIT. The work was completed on the drain by Outram? Yes. Nothing was done to main concrete structure. Did anyone on your behalf instructed by you ever examine the concrete wall or drain inside prior to 1958? No. The question was raised yesterday in regard to earlier litigation you had with Mr. Morgan? Yes. One previous proceeding? No. How many proceedings in Magistrate's Court have you had? Two. In the first one who acted for you? Mr. Sievwright. Was there a fencing dispute owing to the dilapidated condition of the fence? Yes. Certain fencing notices were issued? Yes. Did that matter have to be resolved in the Magistrate's Court? Yes. Was that resolved by the letter you received from Mr. Sievwright in March 1957? I cannot remember because I cannot find any papers, but that would probably be so. LETTER 29 MARCH 1957 EXHIBIT J. Subsequent to that was there another Magistrate's Court proceeding? Yes. On the second occasion who acted for you? You, Mr. Kent. That action was concerned with what? The price of the retaining wall. That matter had to be resolved by Court proceedings? Yes. The dispute over the fence was near the house too? Yes, and hedges. Correspondence has been produced which you heard read yesterday? Yes. The letter was put in from Sievwright addressed to Morgan dated 12 May 1952 and Sievwright was then acting for Mrs. Livingstone; did you know anything about that letter or substance? Not until I heard yesterday. In March 1956 - 29th - 24 May 1956, 31 May 1956 letters were written by Mr. Sievwright to Duncan Matthews and Taylor and 12 May 1952 another letter was written to Mr. Morgan; in the letter of 24 May 1956 final sentence is referred to: "I quite appreciatedamage." Do you know what that refers to? No, all I can think of is that there was a confusion about the top wall - and the drains we found were Mr. Morgan's drains - that's all I can say about that. There was a hedge that had to come down for the wall? Yes. In letter of 12 May 1952 "Civil engineer.....property." I didn't know anything about that until 1958. Do you know now? No.. It was only when the City Council inspector rang and told me about the drain and it was the only time I knew it was my drain in that part of the wall. Did either of the disputes in Magistrate's Court refer to any of the drains? No, not it was all up at the top of the house. Did you make complaint yourself regarding main concrete wall or drains in it until 1958? That is when I first consulted the Council Dept. and I was told if I'd done that before I would not have to pay for the one at the top. I just didn't know. HIS HONOUR. Did you never have discussion with Mr. Sievwright about possibility of damage to drains or to wall in respect to the section in respect to the Pohutukawa trees? No. You had no discussion

HIS HONOUR

with Mr.Sievwright at all? No.

RESPONDENT
CROSS
EXAMINED
BARTON

You did instruct Mr.Sievwright to act for you in connection with the boundary and fencing dispute in 1956? It would probably be 1956 I instructed him. The first letter Mr.Sievwright wrote to Mr.Morgan's solicitors is 29 March 1956? It may have been some time before then. I consulted Mr. Sievwright - you see this dispute about boundaries had been on for some time. Fencing notice - did you know that would be served? No, I just left it to Mr.Sievwright. You no doubt gave Mr.Sievwright all the necessary facts? He came to the property and looked. In your presence? Yes. In addition to his personal inspection he would get further facts from you about the boundary dispute? Only what he saw - only about the side of the house I would tell him. You told him nothing whatever about the long concrete wall running down your steep frontage? No. You were present in Court yesterday when I read notice dated 29 March 1956 to Mr.Morgan by Mr.Sievwright as your solicitor and duly authorised agent "Take notice.....existing surfaces." All this has been done by Mr.Sievwright because I didn't instruct anything like this because at the time I was worried about the other. Whether Mr.Sievwright had it in his mind he was still dealing with Mrs.Livingstone I couldn't say. I honestly know nothing about this notice. When Mr.Sievwright visited the property in your presence did he inspect the wall? No. Can you offer any suggestion how he came by this rather detailed knowledge? That I can't say. Is it your evidence he did this without authority? Yes, because you must remember this was my first property and I had no idea and I had never had any neighbours before. When Mr.Sievwright visited the property in your presence he did not inspect the wall? No, not in my presence. Did he on that occasion tell you that he had acted for the previous owner? No. Did he indicate to you that he had already in his office a specialist's report? No. On that state of property and drains? No. You notice that the thickness of fracture is referred to in that document as approximately 3"? It was not 3" when I saw it in 1955 shortly before I bought property. In 1956 was it 3"? I didn't take much notice of the fracture until 1958. Yet you walked up and down that path at least once every day? Yes. In his letter 24 May 1956 to Mr.Morgan's solicitors Mr.Sievwright says - and your own counsel has drawn your attention to this... "My client quite appreciates.damage." Were there any trees on top part of Mr.Morgan's property at all? Yes there was a big long hedge - they would be classed as trees as they had roots. That is the trouble as Mr.Morgan didn't want to have that hedge removed and we had to go to Court. Did this hedge cause damage to drains on top part of your property? That I couldn't say was that the only damage was caused to Morgan's. You haven't suggested any damage was caused to your property by the hedge? No, because I didn't know. I don't know what is meant in the letter. "My client quite appreciates..... trees." I don't know what

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Mr.Sievwright means by that. Did you hear read out a letter in reply to that last letter 28 May 1956 - Morgan's solicitors in which they say: 2nd para. "Your letter of 24 May..... particulars." In reply to that letter Mr.Sievwright wrote on 31 May 1956: 2nd para. "In regard to my client's wallreport." Mr.Sievwright is saying there that drains damaged by Morgan's trees is a position that can be examined without difficulty? The only drain I told Mr.Sievwright about was the one at the top of the house. You believed that was not yours but Mr.Morgans? I wasn't sure until the plumber told me. After plumber told you you believed it was Morgans? Correct. You're not suggesting Sievwright is referring to the drain in this letter? He might be. 10

Mr.Outram came in Xmas holidays 1956 - January 1956. So you would know after Outram had examined drains in 1956 that you believed it was Morgans? Yes. Will you not agree when this letter was written in May 1956 Sievwright would hardly be referring to that incident? I always believed those drains were Mr.Morgan's when the seepage came out. If you thought that you would have told Mr.Sievwright? I didn't say anything to him after that time. 31 May 1956 the letter by Sievwright - how does he come to mention your drains damaged by Morgan's trees? Mr.Sievwright must have got confused with Mrs.Livingstone as nothing further was mentioned about drains until 1958. Are you suggesting Sievwright had no experts reports? Not to my knowledge. 20

His general authority to act for you would include authority to instruct an expert in the litigation that you were having in 1956? Yes, at the top - this is all in connection with the top. In fact at least one expert was called in that litigation, Mr.Hannifey? Yes. In the litigation which took place in 1956 when Sievwright was your solicitor there was no evidence called about the state of the long wall? No. At no time while Sievwright was acting as yoursolicitor did he tell you that he had an expert's report dealing with the drain? No. When did you first consult Messrs.Buddle, Anderson & Co.? When Morgan would not pay half share of the wall. What year? 1957-58. Was it before this occasion in 1958 when you saw the seepage? Oh yes. Did you give Buddle, Anderson authority to uplift papers from Sievwright? I didn't say anything I only told Mr.Kent that I had had Mr.Sievwright. No correspondence, no file from Sievwright's office was handed over to Buddle Anderson? Not as far as I know. 30 40

COMPLETION OF THE EVIDENCE.

IN THE SUPREME COURT OF NEW ZEALANDWELLINGTON DISTRICTWELLINGTON REGISTRYBETWEEN NAJLO A. KHYATTPlaintiffAND CHARLES MORGANDefendantHearing: April 18, 19, 26, 27, 28, 1961.
May 23, 1961.Counsel: Kent and McKenzie for Plaintiff.
Barton and Schellevis for Defendant.Judgment: 20 July, 1961.

JUDGMENT OF LEICESTER J.

In this case an order for removal, injunction and damages are sought for the invasion of a concrete retaining wall and stormwater pipes by the thirsty roots of Pohutukawa trees growing on the land of the defendant at No.314 Oriental Parade, Wellington.

In April 1955 the plaintiff purchased the adjoining property, No.316, to that occupied by the defendant. A concrete boundary wall separates the two properties. Its age and that of the trees are both unknown but they are said to have been in their present site for the past fifty years. It is claimed 10 that the defendant or his predecessors in title have planted or permitted the growth of these trees behind the wall on the defendant's side of the boundary line; that he has wrongfully allowed the trees to continue in growth until their roots have penetrated the wall and entered the property of the plaintiff; and that as a result of wrongful neglect on his part the roots from the trees have both penetrated and thrust forward the wall causing it to crack and overturn at points along its length. It is further claimed by the plaintiff that by reason of the weakening and cracking of the wall, there exists a continuing 20 danger that it may collapse, throwing large quantities of earth and spoil on the plaintiff's land, the penetration of the roots forcing open her sewerage and stormwater drains so these cannot be satisfactorily renewed until the trees have been removed from the boundary.

The access to the plaintiff's residence, which is comprised of three flats, one of them being occupied by her, is very steep. There is a narrow right of way between the two properties and a zigzag path with steps. When she purchased her property in April 1955, plaintiff says that she only noticed in the wall once crack, about one inch wide, and did not see it until after the property had actually been purchased. The crack which did not give her any concern at the time was towards the top of the wall. At an early stage of her occupancy, the plaintiff found spoil had spilled into her property and claims that, after the matter had been looked into by a drain-layer, it was found that the trouble was on the defendant's side of the boundary. His drains are closer to the Pohutukawa trees than those of the plaintiff. Her drains, stormwater and sewerage, are embedded into the wall, and thin water-pipes are laid over them and extend the length of the wall. Before she had been in her property for a year, the plaintiff spoke to her neighbour about the trees, the leaves of which were falling on her paths and requiring to be swept by her. To this complaint the defendant seems to have replied that the trees were nature as, indeed, they were; and this appears to be the only point upon which the parties have since been in agreement in regard to their respective properties.

At the time of the discussion about the leaves, the plaintiff pointed out to the defendant the crack in the wall and expressed the opinion that the trees might become dangerous. The defendant replied that the crack had been there for a long time. The plaintiff, prior to purchasing her property, did not make any physical inspection of it although she avers that had the wall been in the condition in which it was at the time of this hearing she would have noticed it. She places considerable reliance upon the contention that the deterioration in the condition of the wall has occurred since the time of her purchase. She did not notice that the concrete surrounding the small water-pipes was very cracked and my impression is that she was much more concerned with the state of the house and the possibilities of its conversion into three flats than she was with any features of the wall. If such be the fact, then it is understandable that she omitted to observe the encroachment of the trees into the wall itself. A failure to observe the particulars of one's surroundings, despite daily familiarity with the, is not uncommon phenomenon with human beings.

On going down her steps in August, 1958, the plaintiff saw signs of seepage from the wall on her side of the boundary. It was apparent that this was coming from the drains. Despite the fact that the alteration to her premises involved the linking up of the flats with the drainage system, the plaintiff says that it was not until August, 1958 that she became aware of the actual situation of her drains. In the preceding year she had had litigation with the defendant over the exact boundary between her property and his, and relations had become strained.

When she discovered the seepage, she did not refer this fact to the defendant, but notified the Health Inspector and gave instructions to Mr. Davies, her plumber. She claims that at a slightly earlier stage than the engagement of the plumber, she had seen trees protruding through her wall from the defendant's property. In cross-examination, however, she states that it was not until some time in 1960 that she first saw the trees growing through the wall and that some of this growth is as near as six to eight inches from the sewerage pipes. Upon her discovery of the seepage and of roots on her paths following drain-laying work by her plumber, she placed the matter immediately in the hands of her solicitors who on 4th August, 1958, wrote to the defendant's solicitors as follows:- 10

"As you know, we act for Mrs. N.A. Khyatt and we have to inform you that our client's property has suffered further damage in that the concrete wall on the boundary line maintaining soil from falling into her property has been cracked and broken as the result of roots from boundary trees or hedges protruding and forcing their way into the concrete facing. 20

The position is even more serious in that it now appears that the drain, which runs down that side of the boundary, has been broken also as the result of similar roots and trees from your client's property forcing their way through the pipes. We understand the position has been inspected by an Officer of the City Council, and it has been examined by a Drainlayer acting pursuant to our client's instructions. We intend to obtain estimates as to the cost of necessary repairs to both the wall and the drain, and as soon as these estimates are available, we shall communicate with you again." 30

No reply to this letter was received, nor was anything done in regard to the trees. These are said to be very large with trunks and branches, spreading out like an octopus, behind the concrete wall. They are also described as being hard up against the wall although there is in fact, upon the defendant's property, another concrete wall, slightly lower than that of the plaintiff, and running its full length, which is closer to the trees. For all practical purposes, however, the walls are hard up against each other. 40

The matter remained in this unsatisfactory state until the 7th October, 1959, when, in this instance, the plaintiff's solicitors, wrote to the defendant personally and said:-

"We have been consulted by Mrs. N.A. Khyatt with regard to the damage which has been done to the drains which run down the south boundary line and in respect of which urgent repair work is required.

You will remember that we wrote to your solicitors on the 4th August, 1958, drawing attention to the damage which has been done to the concrete wall on the boundary and to the fact that the drain had then been broken as the result of roots and trees from your property forcing their ways through the pipes. On that occasion, the position has been inspected by an Officer of the City Council and a report was obtained to the effect that the damage was caused through the roots of trees protruding into our client's property and damaging the drains and it was apparent to anyone making an inspection that a similar condition obtained with regard to the concrete wall.

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A further crisis has now arisen and the drains have been broken and spoil disbursted all over the path as a result of roots from these trees again causing serious damage to those drains. We are now having an estimate made of the cost of repairing these drains and it is proposed to sue you for the cost. We also propose to issue proceedings by way of injunction or otherwise to compel you to remove these trees upon the further grounds that they are now threatening the stability of the concrete wall on our client's property and have done and continue to do serious damage thereby. You cannot complain that you have not been fully advised of these consequences and you must accept the responsibility for negligence in these respects. There are courses of action available to our client on the grounds of negligence and/or nuisance and she proposes to exercise these without further ado. If you wish to avoid legal proceedings, it will be necessary for you to remove the trees which are causing the trouble and to undertake the cost of repairing the drains which have also adversely damaged in the way we have indicated above. The matter is urgent and serious."

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This letter drew from the defendant on 10th October, 1959, the following reply:-

"Acknowledging your letter of the 7th, apparently I must again remind your client that the defective drainage and cracks in the 'wall' have existed for many years and these problems were well known to her when she purchased the property.

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They existed even before I became owner of 314, and it cannot be said that I have caused any damage to your client myself and I doubt that trees on my boundary had anything to do with the original damage.

In any case I am having the drainage and the wall examined in detail by competent authorities and if your client thinks to put any responsibility on me, the matter must be settled in Court before any work is done.

In the meantime there is a simple maintenance routine available to your client that most hill-side property owners use that eliminates any need to sacrifice trees or to pester neighbours with threatened law-suits.

The sudden emergency you refer to had nothing to do with trees on my property, the nature of the blockage was identified by the Inspector for the Health Dept., and was probably a direct result of a party given in one of your client's flats the night before, by her departing tenants."

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Any suggestion that the blockage was due to the action of the tenants is denied by the plaintiff and no attempt to establish this suggestion has been made by the defendant. The absence of any co-operation from him led to the issue of a summons against him in the Magistrate's Court; but, as the cost of restoration of the drain and wall proved to be greater than had been estimated, the plaintiff's solicitors gave notice of an intention to discontinue that action, and in a letter of the 16th March, 1960, says:-

"As we have indicated previously, our client is proposing to take proceedings holding you liable for the damage which is being done in the result of roots from trees on your section protruding and causing very great damage to her drains and concrete wall.

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When we last wrote to you on the 7th October, 1959, the writer misunderstood his instructions and thought the cost of repairing the damage that had been done to the drains and the concrete was the sum of £266. 4. 9. It now transpired that the damage is very much more extensive and the most recent estimates indicate that the following sums will have to be expended in order to restore the drains and concrete wall to a serviceable and safe condition of repair:-

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|----|---|------------|----|
| 1. | Removing the roots and reconstructing the drains | £358. 0. 0 | |
| 2. | Renewing defective stormwater drains with cast-iron pipes and fittings
Estimate | £198. 0. 0 | |
| 3. | Renewal of existing boundary concrete wall between 314-316 Evans Bay Road (the wall to be reinforced concrete with fittings approved by the Wgtn. City Council) | £850. 0. 0 | 40 |

We bring these matters to your notice because if you feel that you are able to obtain other estimates at a lower cost, our client would be more than willing to consider them. Such consideration would be dependent only upon the

reliability and financial stability of the tenderers.

The position is very serious in that with the approach of winter something urgently must be done to put the drains and the concrete wall in order. We shall, therefore, leave the matter in abeyance for a period of ten days and you are at liberty to have the drains and/or the concrete wall inspected by any person of your choosing and to obtain any estimates for the work that will have to be done to restore them.

Please take notice also that it is not now intended to continue with the summons which has already been issued in the Magistrate's Court because, in the event of your failure to undertake the work of restoring the drains and the wall or to accept liability within a period of ten days, proceedings will be issued in the Supreme Court seeking similar remedied by way of injunction and damages in the total of £1,406. 0.0." 10

As the awareness of the plaintiff concerning the state of the wall and the enclosed drain is put forward by the defence as of importance, I may say that I am not satisfied that she has been any franker with the Court in regard to these matters than she was as to the price paid for her property. According to her, this awareness as to wall and drain dated from August 1958. On the 29th March, 1956, however, her then solicitors, Mr. A.B. Sievwright, issued to defendant a fencing notice reading:- 20

"TAKE NOTICE that the fence and wall along the boundary between your property as above described and the adjoining land of which I am the owner, viz. No.316 Oriental Parade, Wellington, requires renewal, repair and/or re-erection as they are in places on the wrong line and encroach on my land, in other cases they are out or repair and elsewhere in a damaged and dangerous condition owing to the fact that roots of trees or shrubs planted and growing on your property have grown under the foundation of your own wall and have broken the concrete boundary wall on my property and I require that the work be carried out, on such basis as may be agreed upon between us and in default of agreement as may be determined in accordance with Statutory provision, for the repair, straightening, renewal and/or renovation of the said fence and boundary wall." 30 40

There followed under the details of the work that was to be carried out a description of the "continuous gap in the concrete caused by these roots etc." as being approximately three inches in height. In a letter of a similar date to the notice and written to Messrs.Duncan, Matthews and Taylor who were then acting for the defendant, Mr.Sievwright refers to an expert's report that had been obtained. A further

letter dated 24th May, 1956, from him to these solicitors concludes:-

"My client quite appreciates that other proceedings may be necessary in respect of the repairing of the damage to her wall and drains caused by your client's trees unless your client is prepared to make good that damage."

In reply dated 26th May, 1956, the defendant's solicitors say (inter alia):-

"Your letter of the 24th May makes reference to damage to your client's drains, alleged to be caused by our client's trees. This is the first reference to damage to drains in the correspondence or proceedings and we shall be glad if you will give us further particulars." 10

and they ask for a copy of the expert's report. This request is declined by Mr.Sievwright in a reply dated 31st May, 1956, in which (inter alia) he writes:-

"In regard to my client's wall and drains damaged by your client's trees the position can be examined without difficulty. The expert's report obtained by my client is part of her case and is not available for your inspection. It will be used in evidence if required and it is suggested that your client himself may take steps to obtain an independent report." 20

When recalled to give further evidence upon these letters, the plaintiff conceded that she had, at the time that they were written, instructed Mr.Sievwright to act for her in regard to the dispute over her boundary fence. She agrees also that he himself inspected the property and discussed with her features of it. Nevertheless, she is adamant that she had no discussions at all with her solicitor at this time about the possibility of damage to the drain or to the wall in their relation to the Pohutukawa trees. She can offer no suggestion as to how Mr.Sievwright came to have the detailed knowledge of the situation which he displays in the fencing notice and in the correspondence. On the occasion of his inspection, she says that neither did he tell her that he had acted for a previous owner, nor did he indicate to her that he had already in his office an expert's report upon the state of the property and the drain. For my own part I am unable to accept her evidence that the warning of the impending trouble with the wall and the drain was not apparent to her until August, 1958. Even if the extent of the damage was unknown early in 1956, the danger signals were there and must have been reasonably obvious to her. 30 40

The expert called for the plaintiff, Bruce Elwin Orchiston a qualified architect, has had wide experience with Pohutukawa trees and claims to have studied tens of thousands of them. By a comparison of houses in the near vicinity, he

considers that the wall would have been erected in 1910 and the trees planted some ten years later. He describes the portion of the wall in which the drain is embedded as being near fourteen inches wide and about eighteen inches high. In his view, if it had not been for the roots, the wall would be sound and stable, but as a result of the roots there are a number of cracks in the wall and there are young trees in the cracks. In regard to seedlings which he noticed had been blown about on the property by the wind, he says that these are notorious as the cause of trouble although it takes time for them to grow to a size which would cause such trouble. A feature of Pohutukawas which he stresses is that they have roots known as aerial roots which hang down about six feet from the trees and these when they enter the ground, as well as the ground roots, will travel a long distance seeking moisture. He has no doubt that the trouble of which the plaintiff complains has been caused by such roots. In answer to the query as to why the defendant has not had similar trouble with his drain, which is more approximate to the trees, Mr. Orchiston replies that the defendant's drain is newer and that the appearance of the concrete in his wall indicates that this is only half the age of the plaintiff's wall. In cross-examination he was asked whether on his interpretation of the position the Pohutukawa trees either through the enlarging of the trunk or bole, or through the protrusion of the roots, had forced the plaintiff's drainage system into the defendant's property. He makes the explanation that the movement of the plaintiff's wall is rather more upwards, the pressure of the roots having raised the drain. He does not accept the theory advanced for the defence that the weight of the drainage block pressing down on the bottom of the wall, being perfectly rigid at some stage or another, caused the wall slightly to buckle. On the other hand, he does not seem to disagree that if the joints of a drainage pipe are not watertight, roots will be attracted by the moisture which seeps underneath the pipes, first a hair root will enter and then the roots will grow inside the drain. Nor does he seek to deny that the drain in question has mortar joints which are unsatisfactory because they are not watertight, and when this particular drainage block was constructed no provision was made for expansion or contraction. In answer to questions by the Court, he says that it can be taken as certain that the progress of the roots and their destroying effect have been greater since 1954 than they were in the six years preceding that date, and he adds that in the future the destroying effect will be again accelerated. He rejects the theory that it is the pressure of the rigid upper block upon the lower block of the wall that has caused the cracks through which the roots have penetrated. It seems that he inspected the site on the morning on which he gave evidence and he expresses amazement as to how much the trees had grown during the year that had intervened since an earlier inspection. During this period he claims that some of the roots which were not there at the commencement of the period have grown into the bottom garage, some forty feet away.

The plaintiff also called Trevor Graham Breeden, a general contractor, who does concrete work. He went to the property in connection with the rebuilding of a copper shortly after it was purchased, and it was then that he noticed the crack as a result of incidental observations while walking up and down the path. He claims that each time that he went back to do different work for the plaintiff he noticed the wall becoming worse. The length of the crack, which he did not measure, he estimates to be at least the length of the Courtroom. Although the original wall was quite solid, he thought that the roots that were going through it had definitely lifted it. 10
 Apart from the action of these roots, he could see no reason why the wall should not maintain its stability but, in his view, if the present process continued as it had done for five or six years previously, he considered that the wall would come down into one property or the other. A duly qualified surveyor, Peter Page Hanify, gave evidence in regard to the two concrete walls, one entirely on the property of the plaintiff and enclosing her drain, and the other partially on the property of the defendant. 20
 The encroachment of the defendant's wall, which increased as it became more steep, was from one inch to four inches, the greater part of it appearing to extend onto the plaintiff's property. In the process of survey, he examined the root structure of the defendant's trees and saw roots going through into the adjoining land.

In March 1958, William Edward Canham, an inspector employed by the Wellington City Council, examined the property and later made a report dated 7th August, 1958. In this document he says:-

"A concrete retaining wall extends up hillside from roadway to dwelling site of 316 Oriental Bay. This wall divides the property from 314 Oriental Bay. 30

Both/ the sewer and stormwater drains are encased in the concrete of this wall.

Roots from vines and trees growing in 314 Oriental Parade have penetrated and fractured the concrete of wall for a distance of approx. 100 ft.

The roots have also damaged both sewer and stormwater drains.

A considerable portion of the retaining wall will have to be rebuilt. 40

This will necessitate relaying a considerable section of sewer and stormwater drain.

In any case the drains are past repairing in places."

It seems to him, from a health point of view, it was essential that the fractured sewerage drain should be repaired and, having

diagnosed the fault to arise from the plaintiff's property, he gave her notice to have the drain repaired. She then put the matter in the hands of her plumber and drainlayer, Mr. Davies. In cross-examination, the inspector states that he saw roots in the cracks in 1958 of a width up to three inches.

The plumber and drainlayer, Edwin George Davies, a man of some thirty odd years experience in the business, says that the first six or eight feet is base wall and the second or top portion which encases the drain approximately two feet. He confirms that he was first called on to make an inspection in 1958 and he then cleared the blocked drain which contained a few roots but nothing of consequence in that regard. He had no occasion at this inspection to break into the concrete, and the roots which he saw were small fibrous ones. Subsequently to 1958, he made a further four or more visits to clear the drain and eventually came to the conclusion that the drain was hopeless and had started to disintegrate with the pressure of the roots upon it. As a result of advice which he gave to the plaintiff, he was instructed to instal a new set of stormwater and sewerage pipes. At an early stage of his inspections, he saw that the concrete had been lifted by the roots and that there was a crack in the drain in one of the joints. Mr. Davies admitted in cross-examination that at the time of the erection of the drain, no provision had been made for contraction or expansion of the pipes. He would not, however, accept the suggestion that there would be sufficient expansion and contraction due to change in weather to break the joints. Nor would he agree with the theory put to him that the great weight of the drainage block laid upon the wall had caused it to buckle slightly, the movement leading to the appearance of cracks in the concrete joints of the pipes with moisture going through the cracks and attracting the roots. I shall deal later with the evidence of this witness as to the work done and the cost to the plaintiff of such work.

A great deal of technical evidence is called for the defence. Walter Gordon Morrison, a highly qualified civil engineer, made inspections of the property in August and September, 1960. He observed roots inside the drain pipes and inside the crack that runs for some distance parallel to the top of the wall. The three inch gap in the wall appeared to him well filled with roots. He refers to the fact that the material used on the joints of the pipes almost certainly would be cement mortar which is not employed nowadays because of the damage caused by infiltration into sewers, the trend being very strongly towards using rubber ring joints, the flexibility of which allows for a certain degree of end movement of the pipes without cracks showing. He says that in a drainage block such as the one with which the Court is concerned, thermal expansion tends to cause longitudinal movement of the joints and any displacement due to tree roots would cause a slight degree of rotation. He confirms no provision was made for expansion or contraction as far as he could see. He considers

that if the drainage block was not free to expand or contract very substantial stresses would be set up in the concrete surrounding the pipes, and anything in concrete ninety feet long would be almost certain to crack in a number of places. In cross-examination, however, he acknowledges that the block would be just as prone to expansion and contraction forty years ago as it was five years ago. He agrees that if there was a minute cracking in the concrete wall and roots in proximity thereto, these, if small enough, would start to penetrate at that particular point where the minute crack was. 10
 If the crack opened up, there was a possibility of the penetration by other roots and so the process went on - a process which, if not arrested, could give rise to a serious situation. He does not dispute that in this particular case that roots have in some manner or another penetrated the wall with its concrete casing, into the pipes, and with moisture expanded until such pipes have exploded. He agrees with the theory that the uncontrolled roots have caused movement of the concrete blocks causing these to lift more and more as the roots have grown, and with the profusion and strength of roots 20
 greater at some points than at others, the lifting motion would vary accordingly. He agrees further with the suggestion that if there were movement of the concrete block because of shrinkage, temperature, or anything else severe enough to crack the concrete block, the pipe would almost certainly crack at the same time. In my opinion, such agreement on his part amounts almost to confirmation of the theory advanced by the plaintiff. It would only be another manifestation of the power of roots. This witness says that they would cause 30
 cracks in the concrete if the Pohutukawa trees were built practically up to the concrete wall and exerted pressure as the result of their growth and expansion. The real essence of the matter is, I think, to be found in the following short extract from Mr. Morrison's evidence in answer to questions put to him by the Court:-

"Is it a reasonable hypothesis that if the cracks in the concrete were caused by the pressure of the roots and the crack caused at the point of the pipes, that the roots in time would find ready entrance into the pipes at that point? Yes, the first major crack 40
 system is the longitudinal one. It has lifted the old block. If in lifting or due to temperature changes there became cracks, then I feel certain most of them would be reproduced in the pipes. Of course the root growth would eventually block the pipe? Yes it has done so."

A public valuer, Peter Robert Holmes, deposes that an investigation of the records of the house at 316 Oriental Parade shows that it was originally built in 1898. The existing wall is 63 years old being constructed at the time 50
 when reinforcing was not generally used. According to the records of the Wellington City Council sewer drainage was

available in the Oriental Bay locality in 1894 and, in the opinion of the witness, would have been available when the house was erected. Mr. Holmes also thinks that in the absence of reinforcing, the wall, being composed of fairly low grade concrete, would tend to offer less resistance to fracture than the type of wall which would be built today, and he has no doubt that, in the present state of the crack in the wall with the roots in it, these have been attracted to the water seeping through the fractured drain, have forced their way in between the lower wall and the drainage block and pushed the latter upwards from the wall. He states that he would be surprised if substantial cracking has not been evident for fifteen years or longer. He agrees that the roots have most certainly caused the damage to the wall and that the origin of the cracks which resulted in the breaking of the pipes consisted in the pressure of powerful roots against a weak wall. In his view once the roots got into the wall and caused the drainage block to lift, the process of damage to the pipes was quickened. A purchaser on inspection of the property in 1955, he says, could not fail to have observed the intrusion of roots into the cracks in the wall if it was then in its present condition.

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James Coull Sterling, a Fellow of the Royal New Zealand Institute of Horticulture, has had experience with trees generally and Pohutukawas trees in particular, over a period of many years. He thinks that the trees in question are fifty years old and could be older, and that they were there before the erection of the concrete wall. On his inspection, he saw on the ground roots as thick as his arm although those seen in drain were not as thick as his wrist. In the crack at the top of the wall he observed a large amount of Pohutukawa roots, the thickness of which would equal his thumb. In his opinion the process of the root system above the ground in its search for moisture has been visible for some thirty years. He fixes a similar time for the pressure exerted by the roots and the trunks of the trees. Over the past six years, he does not think that the growth of the roots has been quicker than at an early period. He has never seen a situation similar to that existing in the present case, but he agrees that if something is not done about the roots they will continue increasing in size to the disadvantage of the wall and of the drainage to an extent that no one can foresee. The mere topping of the trees would not, in his opinion, constitute any remedy for the danger of the roots. Another expert for the defence, Thomas Vivian Clendon, an engineer of high qualifications, estimates from the general appearance of the wall that it was built about 1900. He describes it at the present time as in poor condition, deterioration having taken place over the years. He regards the long crack or fracture running parallel to the top of the wall as having arisen from points of weakness where fresh concrete had been poured on the old concrete. Along most of the length of this crack or fracture he observed roots and other growths of trees. He found that

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the whole crack was almost full of growth and some of the roots he measured were two inches in diameter. Asked whether in 1955 all that could be seen was a narrow crack in the wall, he replied that he would be amazed if that were said and that he could not see such a statement could possibly be true. He agrees that the bulk of the concrete and the drain would be forced upwards in one piece if roots got into the joint between the concrete drainage block and the old wall. As this has been in its present position at least since 1900 and the trees, he thinks, are of a similar age with the wall, the movement of the wall by the growth of the trees and the roots would, in his estimate, have been going on during the whole of that period. When resistance has broken down as the result of the pressure exerted by the roots, he agrees that the structure would give way at certain points and that cracks could be expected in the wall, particularly at these points of weakness. Further, that cracks having manifested themselves, wherever they were, roots would spread in that direction and penetrate the cracks. He also agrees that with continued growth of the trees the wall could be pushed out of line, disintegration set in, and the present position be aggravated with the possibility of the wall being completely undermined. At what point of time the wall would break and from what particular cause he finds it impossible to say. He describes the theory that pressure of roots on the wall led to cracks in the pipes as possible but not necessarily certain. He is thus in agreement with Mr. Sterling that if nothing is done to arrest the progress of these roots, the ultimate result may be to render the wall completely unserviceable.

The defendant in his evidence states that he has lived at 314 Oriental Parade since 1939. Before the plaintiff purchased the property, he was very familiar with it as he had had a lease of it in 1944 for four or five months which, he says, he was very glad to relinquish. He claims that at the time of the plaintiff's purchase, the wall was extensively damaged and considerable root growth was clearly visible. He himself had inspected the property at this time with a view to purchase, and had had discussions with the Public Trustee about the price. Circumstances which deterred him from purchasing were the defects in the wall and the drainage system of which, he declares, he knew too much. He claims that the fracture in the wall was so prominent in 1955 that an observant person could not possibly have overlooked it and that over the past ten years there has been no material difference in the width of the fracture. He says that the plaintiff complained to him about the state of the trees in or about September 1955, although she did not then specifically say why she disliked them. It would appear that the conversation then related to the accumulation of leaves from the trees. Whatever these early conversations were, it seems evident the defendant could not visualise any way of removing the roots without "upsetting the whole equilibrium of the area involved" or, in other words, without destroying

or substantially interfering with the access to his property. Some work seems to have been done at his request in cutting back the trees but even this was limited and unfinished. His contention is that if the drainage block were to be removed, the effect would be to remove also all the root growth that has led to the plaintiff's action. This contention does not appear to have any support from his expert witnesses. The cross-examination of defendant revealed that he has had trouble and complaints over the wall and the roots since 1952, but in the belief that there was nothing that he could do, he ~~has~~ done nothing. That was certainly his attitude in 1958 and ever now he is not disposed to do anything save take the decision of an arbitrator - a course which was not suggested by him in correspondence prior to the commencement of the action. Faced with questions which indicated that his own experts considered that the wall would in time disintegrate unless the present growth of the trees and the roots were arrested, he asserts a knowledge of the problem and the particular handling of the situation that they do not possess. He considers that he should have co-operation from the plaintiff, and that this should consist of a regular process of clearing her drain and of the discarding of her drainage block. He does not himself offer any co-operation. He asserts that he has replied to all the correspondence, but I do not accept this statement and I consider that his attitude at all times since 1955 in relation to the trees and the roots has been one of passive and unneighbourly resistance. Questioned by his counsel as to whether he has any idea of the cost of removing the roots and cutting a swathe around the trees, he replies that it is not the cost but the impracticability of doing this and the destroying of his access which is the real factor. He adds that he has had no quotations as to what the cost of removing the roots and cutting the swathe would be, nor as to the cost needed to ensure that his access would be preserved. I have endeavoured in the foregoing pages to summarise the evidence that has been given on both sides of this unfortunate dispute. The major part of the evidence is that given by experts on either side and, as is not uncommon with experts, they disagree upon a number of factors. Upon a consideration of their evidence, and all the other evidence called and upon the balance of probabilities, I consider that the facts upon which this Court has to ~~find~~ ^{find} its decision can be stated shortly as follows:-

1. The deterioration of the plaintiff's wall and drainage pipes by encroaching roots is due to a gradual process extending over a period of thirty or more years.
2. The plaintiff knew or ought to have known of the existence of this process within a year of the purchase of her property in 1955.

3. The defendant knew of the existence of the process as early as 1944 and, beyond topping the trees, has done nothing to arrest the process and offers no co-operation now towards that end.
4. The process consisted in the invasion into cracks in the plaintiff's wall of encroaching roots with the result that cracks occurred in the enclosed drainage pipes providing moisture and causing roots in quest of such moisture ultimately to expand and explode the pipes, and this process has been accelerated since 1954. 10
5. It is immaterial whether the cracks in the plaintiff's wall were caused by the pressure of the tree trunks and roots upon it or whether they were caused by the weight of the drainage block on the lower portion of the wall or whether they were caused by a fracture in the joint or joints arising from the pouring of concrete over the drainage block or whether there has been a failure to make provision for the contraction and expansion of the pipes; and had it not been for the roots the wall would have remained sound and stable for the purpose for which it was required. 20

In 1913, under circumstances similar to those in the present case, Chapman J. could find no precedent for an action of this kind. Rose v. Equity Boot Company and Hannafin 32 N.Z.L.R. 677, 679. It is clear, however, that this view is no longer sound. In Ireland, in an action for damage caused by the collapse of a wall under which the roots of a tree had burrowed, Ross J. had no doubt that the plaintiff had a cause of action just as though the wall had been damaged by the overhanging branch of a tree on the defendant's land. He granted an injunction restraining the defendant from continuing to permit the injury and awarded damages. Middleton v. Humphries (1913) 47 I.L.T. 160. The case is approved and applied in Butler v. Standard Telephones and Cables Limited (1940) 1 K.B. 399 (in which Lewis J. describes the decision as perfectly right) and in McCombe v. Read and Another (1955) 2 Q.B. 529. Prior to Butler's cases there appears to be no previous English decision on nuisance caused by the spreading of the roots of trees beyond the boundary of the owner's land; but subsequently there has been ample authority in New Zealand for the proposition that a mandatory injunction may be granted to the owner of land suffering actual and sensible damage from the encroachment of roots of trees 40

into an adjoining property to restrain him from permitting the roots to encroach and to order him to remove them.

Mandeno v. Brown (1952) N.Z.L.R. 447; Woodnorth v. Holdgate (1955) N.Z.L.R. 552; Darroch v. Carroll (1955) N.Z.L.R. 997; Roud v. Vincent (1958) N.Z.L.R. 794. "In our opinion," says Lord Goddard C.J. delivering the judgment of the Court in Davey v. Harrow Corporation (1958) 1 Q.B. 60, "it must be taken to be established law that if trees encroach, whether by branches or roots, and cause damage, an action for nuisance will lie." There does not appear to be any material difference between the position of overhanging branches and of encroaching roots of a tree over and onto the land of an adjoining owner. He is not entitled to put the adjoining owner to the expense of having to abate the nuisance, nor is it any answer to a claim for damages that the adjoining owner could in fact do so. Here, the defendant has abandoned the plea in para.19 of his amended statement of defence that by requesting and preventing the cutting of the roots the plaintiff elected to have the nuisance abated and is now debarred from pursuing any claim for an injunction or damages. That such an encroachment of roots is not a trespass which may ripen into a right in the course of time but a nuisance is also well settled.

Lemon v. Webb (1894) 3 Ch. 1 per Kay L.J. at p.24. No one has any right to have roots encroaching on the land of another acquired by prescription or under the Limitation Act 1950; it would also seem in New Zealand that before any prescriptive right can be acquired any land it must be registered as an easement or restrictive covenant on the title if it is to be effective against the registered proprietor - s.64 Land Transfer Act 1952. The present case I regard as a plain instance of a continuing nuisance. "In my opinion an occupier of land 'continued' a nuisance if, with knowledge or presumed knowledge of its existence, he fails to take any reasonable means to bring it to an end though with ample time to do so."

Sedleigh-Denfield v. O'Callagan (1940) A.C. 880 per Viscount Maugham at p.894; Leanse v. Edgerton (1943) 112 L.J. K.B. 273; and this is so although the nuisance may have begun before his ownership commenced. Broder v. Saillard (1876) 2 Ch. 692; Manley v. Burn (1916) 2 K.B. 121. If no right to encroach could be acquired by prescription - and the reason for this would seem to be that the extent of the encroachment varies from day and year with the natural growth of the trees - then the age of the trees and the time that they have been encroaching are, subject to a consideration of the limitation period in respect of the action, alike irrelevant. Nor can it be any defence that cracks in a concrete wall leading to cracks in sewerage pipes encouraged the roots to extend their quest for moisture; nor that the adjoining owner, injured by the encroachment of the roots, came to the nuisance because he purchased the property at a period when the nuisance was continuing. In Tipping v. St. Helen's Smelting Company (1865) 1 Ch. App. 66, Vice-Chancellor Wood holds that the plaintiff came to the nuisance does not disentitle him to the aid of a

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Court of Equity. Such an allegation constitutes an ineffectual defence - Halsbury 3rd Ed. Volume 28, at p.163. Nor does it matter that a plaintiff, with knowledge or the existence of the nuisance, places himself in its path by building near it. Sturges v. Bridgeman (1879) 11 Ch. 852.

The cause of action for tort accrues when the resulting damage manifests itself. In the case of a continuing nuisance or a potential nuisance which is liable repeatedly to cause damage, it would seem that a fresh cause of action does not arise from each fresh damage, it being the continuance of the cause plus the fresh damage which constitutes the cause of action. Whitehouse v. Fellowes 10 C.B. (N.S.) 765; Darley Main Colliery Company v. Mitchell (1886) 11 App.Cas.127. In cases of this kind, the damage is the gist of the action and it is properly stated as part of the "cause of action". In Woodnorth v. Holdgate (ante), Mr. Justice McGregor was faced with a problem as to whether, sensible and actual damage by encroachment having been established, a mandatory injunction ordering the removal of the offending trees (from which the encroaching roots emanated) should be granted. He applied the principle laid down in 24 Halsbury's Laws of England 2nd Ed., p.191, para.162, wherein it is stated:-

" As a rule, and subject to legal and equitable defences, an injunction will be granted to restrain the continuance of a nuisance where the injury done by it is substantial, or where, however slight the damage may be, the nuisance is a continuing or recurring one, so that it would give rise to a series of actions if no injunction were granted, or where the defendant claims the right to continue the conduct complained of, or threatens to do so."

No doubt the evidence which would justify the Court in requiring by mandatory injunction an owner to remove his trees must go further than an injunction that does no more than restrain such an owner from permitting the roots of the trees to encroach upon the adjoining land. In the latter type, the details of how compliance can be made with the injunction is left to the owner to formulate. Then again, the more qualified injunction is appropriate to a case where there is unanimity amongst experts as to a manner of dealing with the nuisance without the necessity of removing the trees. Roud v. Vincent (1958) N.Z.L.R. 794, at p.795. The remedy of injunction if an action on the case lies, must be available if the nuisance is a continuing one and it is not right to throw upon the plaintiff the burden of watching for further encroachment. McCombe v. Read (ante). In my opinion the conduct of the defendant in regard to the cessation of the nuisance provides a test as to whether the injunction should be mandatory or qualified. In Attorney-General v. The Sheffield Gas Consumers Company (1852) 3 De G.M. & G. 304, the Court held that, when

a nuisance is a continuous one, an injunction should not be refused because actual damage arising from it was slight. The same rule would apply where there is an expressed intention frequently to invade the legal right of the adjoining owner. In Roberts v. Gwyrfa District Council (1899) 2 Ch.608, Lindley M.R., said:-

"His (plaintiff's) rights are infringed by persons who admit that they have no right to do what they are doing; and, under such circumstances, unless the infringers are prepared to stop what they are doing, an injunction to restrain them is almost a matter of course."

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The evidence in this case establishes not only the invasion of a common law right but a reasonable belief that, without an injunction, there is likely to be a repetition of the wrong. In such circumstances I feel that there should be a mandatory injunction to remove the trees when the attitude of the defendant gives a clear indication that he is not disposed to do anything about the roots. No suggestion is put forward by him that a real remedy can be found for the invasion of the roots other than in the removal of the trees from which the roots emanate. In the absence of any such suggestion, I fail to see why it should be left to the Court to speculate upon what lesser corrective could afford the relief to which the plaintiff is entitled.

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The defendant has pleaded that, under the Limitation Act, 1950, if damage due to the roots is proved, then the whole of the plaintiff's claim or such part as may be referable to the damage cannot be recovered in respect of any injury to the plaintiff caused more than six years before the 14th April, 1960, on which date present proceedings were brought. The defendant says that, if the plaintiff is to recover full damages, then the nuisance must have been caused within the six year period. In nuisance, whether it is the damage consequent on an act or omission rather than the act or omission itself which provides cause of action, then the action is only maintainable in respect of the damage and not until the damage is sustained. In general the period of limitation under the Act begins to run when the cause of action accrues; but, where there has been a continuance of the damage, a fresh cause arises from time to time as often as the damage is caused. If the nuisance has not been continued, the action will be statute barred, if based upon damage which was caused more than six years before the action is commenced. In Darley Main Colliery v. Mitchell (ante), an excavation was made by the defendants under the plaintiff's land in 1868. As a consequence two subsidences occurred, the first in 1868 for which the plaintiff received satisfaction, and the second in 1882. To the plaintiff's action in respect of the latter damage, the defendants pleaded the Statute. A majority of the House

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following Backhouse v. Bonomi (1861) 9 H.L. Cas.503, held that in such circumstances the cause of action in regard to the second subsidence did not accrue until that subsidence occurred, notwithstanding that the defendants' responsibility for it was referable to their actions fourteen years previously. The limitation plea failed. Lord Halsbury at p.133 says:-

"I cannot understand why every new subsidence although proceeding from the same original act or omission of the defendants, is not a new cause of action for which damages may be recovered..... The defendant has originally created a state of things which renders him responsible if damage occurs :
 If by hypothesis the cause of action is the damage resulting from the defendant's act, or an omission to alter the state of things he has created, why may not a fresh action be brought? A man keeps a ferocious dog which bites his neighbour; can it be contended that when the bitten man brings his action he must assess damages for all possibility of future bites? A man stores water artificially, as in Fletcher v. Rylands (1868) L.R. 3 H.L. 330, the water escapes and sweeps away the plaintiff's house; he rebuilds it and the artificial reservoir continues to leak and sweeps it away again. Cannot the plaintiff recover for the second house, or must he have assessed in his first damages the possibility of any future invasion of water flowing from the same reservoir? The wrong consists, and, as it appears to me, wholly consists, in causing another man damage, and I think he may recover for that damage as and when it occurs."

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This decision was applied in Crumbie v. Wallsend Local Board (1891) 1 Q.B. 503 and in Tunncliffe and Hampson Limited v. West Leigh Colliery Co.Ltd.(1905) 2 Ch. 390; (1906) 2 Ch. 22; (1908) A.C. 27.

The defendant on this point places some reliance on Archer v. Catten & Company (1954) 1 W.L.R. 775, which is an action for damages for negligence and breach of statutory duty brought by a furnace worker against his former employers. In his judgment Streatfield J. accepts the proposition stated in Charlesworth's "Law of Negligence" 2nd Ed. at p.597, that "in an action for negligence, the cause for action accrues at the time of the negligence, because it is then that the damage is caused, even though its consequences may not be apparent until later", and he says that this proposition is supported by Howell v. Young (1826) 5 B. & C. 259. With due respect to the judgement, it seems to me that the law is too widely stated in Charlesworth since numerous instances of damage based on negligence may be found when the damage is not coincidental in time with the negligent act itself. The case of Howell v. Young (supra) is one in which the break of duty on the part of a solicitor, against whom negligence was alleged,

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was itself the cause of action. It may be, of course, that today when an action for negligence against a solicitor is regarded as being grounded not in tort but in contract, the cause of action arises as soon as the contract is broken.

The plaintiff sues for a sum of £726 as damages and as "being the cost of repairing the concrete retaining wall and the sewerage and stormwater drains". In point of actual fact, the evidence on the question of quantum of damage given for the plaintiff was that the sum of £556 was expended in installing fresh drains and a sum of £170 was the estimate of the cost of repairing the wall. With the exception of Mr. Thomas, called for the defendant, the evidence shows that the total figure as claimed is not unreasonable. An estimate of £270 was given by Mr. Thomas but I am unable to accept him as a reliable or competent witness in this regard. A number of efforts were made by the plaintiff's plumber and drainlayer to effect repairs to the drain, but the position became hopeless and the plaintiff had to have installed, from the top of the wall to the bottom, an outside drain which was fixed on timber and bolted through to the concrete. I have no reason to reject the evidence of Mr. Davies that an alternative method of dealing with the erection of a new drain would probably have cost a further £500 although, as he is the one who erected the new drain, allowance has to be made for his further statement that "it would not have been such a good job". The sum of £170 is the cost of a plasterer for the wall damage as estimated by Mr. Orcheston who also recommended that the trees be first removed and the roots made impotent. In the opinion of Mr. Morrison no repairs would be effective for any period so long as the trees were there, and Mr. Sterling agrees with the view that, if the wall is to be preserved, the trees must go. It is indisputable, I think that the weight of the evidence is to be found in these and similar expressions of opinions. It has been urged upon me that it would be unjust were the defendant called upon to bear the total of these costs when the process that has led to the necessity for a new drain and for repairs to the wall arose prior to the purchase by the defendant of his property. Even if occupiers of a property do not create the continuing nuisance or add to it in any shape or form, it has been held that, where the fact of its existence has been brought very pointedly to their notice, and where having had ample time to put the matter right they have done nothing, they are equally responsible with the owner of the freehold and with the actual tortfeasor for the adverse consequences of the tort. Maberley v. Peabody & Co. (1946) 2 ALL E.R. 192 at p. 195. So far as the claim for the cost of the new drain (£556) is concerned, I think in all the circumstances that the defendant is liable for this sum arising as it does as a fresh cause of action due to the continuance of the nuisance plus the fresh damage involving the necessity to abandon the old drain and erect a new one. The Court is

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constrained to look at the position at the time the damage manifests itself and to enquire who at that time owned and was responsible for the trees, the roots of which have caused the damage. Several witnesses have described the wall as weak and deteriorated. It seems, however, to have stood up for fifty years. It may be that one who continues a tort, such as nuisance, is affected by the "think skull rule" and must take his victim as he finds him; but whether this principle applies to specially sensitive property, such as a root-infested wall, has yet to be decided. While I have accepted the theory that the cracks in the wall and the consequential damage to it have their origin in the pressure of the trunks and the roots, I think it impossible to say when the process first began and whether, when it did begin, there were inherent features in the construction of the wall itself which assisted in the continuance of the process. I feel that it would be inequitable to call upon the defendant to pay the whole cost of the estimated repairs for the wall. As I have said, the plaintiff should have been aware of the condition of the wall within a year of her purchase and if earlier attention had been given to repairing it, I do not think that the cost as now estimated would have been nearly as great. I propose to allow the sum of £70 to the plaintiff towards the estimated cost of the repairs to the wall.

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There will be an injunction that within a period of 3 months from the date of this order the defendant remove, from, upon, and alongside the boundary of the two properties, the Pohutukawa trees and that he remove from the land of the plaintiff the roots of such trees or otherwise destroy or render them impotent. I award the plaintiff in respect of the costs of the new drain and of the repairs to the wall the sum of £626 together with costs according to scale on that amount, disbursements and witnesses' expenses as fixed by the Registrar. I certify for an allowance to counsel of £12.12.0 per day for each of the extra days.

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Solicitors for the Plaintiff: Messrs. Buddle, Anderson & Kent,
Wellington.

Solicitors for the Defendant: Messrs. Duncan, Matthews & Taylor,
Wellington.

IN THE SUPREME COURT OF NEW ZEALAND.WELLINGTON DISTRICTWELLINGTON REGISTRYNO.A.149/60BETWEEN NAJLO A. KHYATTPlaintiffA N D C. MORGANDefendantCERTIFIED COPY OF JUDGMENT

THIS ACTION coming on for trial this 18th, 19th, 26th, 27th and 28th days of April, 1961 and the 23rd day of May, 1961 before His Honour Mr. Justice Leicester after hearing the Plaintiff and Defendant IT IS ADJUDGED THAT within a period of three months from the date of this Order the Defendant remove from, upon and alongside the boundary of the two properties, the Pohutukawa trees and that he remove from the land of the Plaintiff the roots of such trees or otherwise destroy or render them impotent AND IT IS FURTHER ADJUDGED that the Defendant pay the Plaintiff the sum of SIX HUNDRED AND TWENTY SIX POUNDS (£626. 0. 0.) in respect of the costs of the new drain and of repairs to the wall and that the Defendant pay the Plaintiff her costs of this action according to the scale on the said sum of SIX HUNDRED AND TWENTY SIX POUNDS (£626. 0. 0.) amounting to ONE HUNDRED AND THIRTY FIVE POUNDS ELEVEN SHILLINGS (£135.11. 0.) and disbursements and witnesses' expenses amounting to FIFTY THREE POUNDS TWELVE SHILLINGS (£53.12. 0.) as fixed by the Registrar and appearing in the schedule hereto.

DATED: the 20th day of July, 1961.

By the Court,

E.A. GOULD (signed)

L. S.

Deputy Registrar.

SCHEDULE**Judgment**Costs:

£626. 0. 0

Issue	10.10. 0	
Preparation	15.15. 0	
Trial	46. 6. 0	
Five extra days	<u>63. 0. 0</u>	£135.11. 0

Witnesses' Expenses:

Plaintiff - 2 days	2. 0. 0	
Davis - 1 day	2. 0. 0	
Orchiston - 1 day	3.10. 0	
Qualifying fee	10.10. 0	
Canham - $\frac{1}{2}$ day	1. 0. 0	
Hanify - $\frac{1}{2}$ day	1. 0. 0	
Breeden - 1 day	2. 0. 0	

Disbursements:

Filing fee on writ	4. 0. 0	
Authority to Act	10. 0	
Service Fee	1. 1. 0	
Affidavit of Service	10. 0	
Oath Fee	7. 0	
Jury Notice	10. 0	
Sheriff's Fee	2. 0. 0	
Filing Fee on praecipe to set down	1.10. 0	
Filing Fee on remanet	1. 0. 0	
Sealing Fee on subpoena	1. 0. 0	
Hearing Fees	13.10. 0	
Associate's Fees on notes of evidence	4. 4. 0	
Sealing Order	<u>1.10. 0</u>	£53.12. 0

£815. 3. 0

IN THE COURT OF APPEAL OF NEW ZEALANDNO. C.A. 31/61.BETWEEN CHARLES MORGAN
AppellantA N D NAJLO A. KHYATT
Respondent

TAKE NOTICE that this Honourable Court WILL BE MOVED on Monday the 2nd day of October, 1961 at 10 o'clock in the forenoon or so soon thereafter as Counsel can be hear ON APPEAL from the whole of the judgment of the Supreme Court of New Zealand delivered by the Honourable Mr. Justice Leicester at Wellington which judgment bears date the 20th day of July, 1961 in an action No.A.149/60 in which the abovenamed Appellant was Defendant and the abovenamed Respondent was Plaintiff UPON THE GROUNDS that the said judgment is erroneous in fact and in law.
DATED at Wellington this 29th day of September, 1961.

C. Morgan,
Appellant

To: The Registrar, Court of Appeal of New Zealand

And to: The Registrar, Supreme Court, Wellington

And to: The abovenamed Respondent

This notice of Motion on Appeal is filed by the Appellant in person whose address for service is at 314 Oriental Parade, Wellington.

IN THE COURT OF APPEAL OF NEW ZEALANDC.A. 31/61BETWEEN CHARLES MORGANAPPELLANTAND NAJLO A. KHYATTRESPONDENTCoram:Gresson P.
North J.Hearing

- 19', 20' February 1962

Cleary J.

Counsel- Appellant in person
Kent for RespondentJudgment

- 7th MAY 1962

JUDGMENT OF THE COURT DELIVERED BY CLEARY J.

Appeal from a judgment of Leicester J. in an action heard before the Judge alone.

The action was between the owners of two neighbouring properties situate in Oriental Parade, Wellington. After a somewhat lengthy hearing the learned Judge ordered the appellant (who was the defendant in the proceedings in the Court below) to remove certain Pohutukawa trees growing on his land alongside the boundary between his property and the respondent's property, and also gave judgment against the appellant for £626 for damage caused by the roots of the trees to a wall and stormwater and drainage pipes on the respondent's land. The facts are fully set out in the judgment appealed from, but some recapitulation is necessary in order to make clear the nature of the damage which gave rise to the dispute. 10

The appellant lives in his house property at 314 Oriental Parade, and the respondent owns the adjoining property to the north, 316 Oriental Parade, which was also a house property when she bought it in 1955, but has since been converted by her into 3 flats, one of which she occupies herself. Both sections in their natural state must have sloped quite steeply to Oriental Parade, and both buildings have been erected some distance back from the street. The access to the respondent's property consists of a rather steep zigzag path with landings at intervals. Standing on the respondent's property, and within a few inches of her southern boundary, there is what has been described in the evidence as a concrete wall, although this description needs some amplification, for it really consists of two parts. The lower portion varies in height 20

in different sections. It is described as being of mass concrete in some sections, but in other sections as being little more than a plaster veneer over a rock face. We shall refer to this part of the structure as "the lower wall". The higher portion of the so-called wall consists of a concrete mass about 18" high and about 12" wide, in which there were formerly embedded the sewage and stormwater drains carried from the respondent's property towards Oriental Parade. This portion, surrounding the drainage pipes, may be conveniently referred to as "the drainage block". It slopes at an angle of perhaps 45 deg. towards Oriental Parade and would seem to be about 90' long. It should also be added that on the appellant's property a somewhat similar method has been adopted for carrying his drains to Oriental Parade, in that they likewise are encased in a concrete surround constructed on or near the boundary between the appellant and the respondent. This drainage block on the appellant's property is on a somewhat lower level than the one on the respondent's property, but hard up against the respondent's wall.

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The witnesses were generally agreed that the respondent's drainage block had been in existence for 50 or 60 years. There was some difference of opinion between them as to whether the lower wall and the superimposed drainage block had both been erected at the same time. One witness thought that the drainage block had been erected first on a rock base, and that the lower wall was erected later, perhaps when the zigzag steps were formed. Others thought that the lower portion of the wall had been erected and that the drainage pipes were then laid on top of it and encased in concrete, more or less in one operation. This difference of opinion seems quite immaterial, as all the witnesses were agreed that, whatever process had been followed, there remained a line of probable weakness in the join between the drainage block and the lower wall, that cracks must have developed along this line of weakness, and that the roots from the pohutukawa trees eventually entered these cracks. Again, there was some difference of opinion as to the cause of the development of the cracks. Some witnesses thought that changes in temperature caused the pipes within the drainage block to set up stresses which resulted in the cracks between the drainage block and the lower wall at the line of weakness, and that thereafter the whole heavy drainage block moved down the slope to some small extent and so caused a cleavage between the drainage block and the lower wall. Others were of the opinion that the cracks developed first as ordinary hair-cracks at the line of weakness, and that the fibrous roots from the trees were thus enabled to enter into and afterwards to enlarge the hair-cracks. Notwithstanding the importance which the appellant appeared in his argument to attach to the cause of the fracture, we do not think that anything turns on this difference of

between the witnesses. Whatever method may have been employed in the construction of the drainage block, and whatever may have been the original cause of cracks occurring between the drainage block and the lower wall, the witnesses were all agreed that the roots had entered the cracks, and that in the course of time they caused a gap to develop between the drainage block and the lower portion of the wall, which varied from 1" to 3" in width and extended along the greater portion of the wall. It was likewise agreed that the roots had come, in the main at least, from four pohutukawa trees on the appellant's property of unknown age, which at the time of the hearing were not more than 12" to 18" clear of the boundary line. It was also agreed that the roots, having entered the cracks, thereafter found entrance into the drainage pipes and caused damage. The joints of the drainage pipes were of mortar, and although they may have more readily enable the roots to gain entrance to the pipes than would modern joints, we cannot regard this as material. 10

Mr. Davies, a master plumber and drainlayer, a witness for the respondent, said that in 1958 he was first called in to clear the drains embedded in the respondent's drainage block, and he found them blocked by roots which he removed, but there were no big roots at that time. Thereafter, he said, he was called back at least five times to clear the drains, which had become increasingly obstructed, and he found bigger roots until he regarded the task of clearing the drains as hopeless. Apparently he advised the respondent to instal a new set of sewage and stormwater drains, and this was done. The drainage block was abandoned, and the new drains were placed alongside the lower portion of the wall, and were fixed on timber which was bolted to the wall. The new drains were of cast-iron pipes with rubber rings at the joints. This work was carried out some months after the respondent had issued her proceedings against the appellant, but before the action had been heard. As to this, the appellant made a complaint, which we shall refer to later. 20 30

We think that Leicester J. was wholly justified in arriving at the findings of fact set out in his judgment. After referring to the gradual process of the encroachment of the roots over a period of thirty or more years, the learned Judge expressed his crucial findings in the following passage :- 40

The process consisted in the invasion into cracks in the plaintiff's wall of encroaching roots with the result that cracks occurred in the enclosed drainage pipes providing moisture and causing roots in quest of such moisture ultimately to expand and explode the pipes, and this process has been accelerated since 1954.

It is immaterial whether the cracks in the plaintiff's wall were caused by the pressure of the tree trunks and roots upon it or whether they were caused by the weight of the drainage block on the lower portion of the wall or whether they were caused by a fracture in the joint or joints arising from the pouring of concrete over the drainage block or whether there has been a failure to make provision for the contraction and expansion of the pipes; had it not been for the roots the wall would have remained sound and stable for the purpose for which it was required.

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The appellant's evidence shows that the trees were growing on his property when he acquired it in 1939. He had not planted the trees, and after going to his property he did nothing positive or active to cause injury to his neighbour's property, which came about through the growth and spread of the tree-roots over the years. He presented his case to us in person, and quite understandably his presentation of the case was influenced by the considerations we have just mentioned. In these circumstances it may be appropriate to refer to some of the principles applicable to the law of nuisance, which are well known to lawyers but may not be fully appreciated by laymen. Nevertheless they must be applied by the Courts in the cases that come before them for determination.

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At the basis of this branch of the law there lies the necessity of keeping a balance between the right of an occupier to use and enjoy his own property, and the right of his neighbour to be protected from interference or injury. The conflict that may arise between these rights is shown by the following passage from 29 Halsbury 3rd. edn., p. 133 :

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Owners or occupiers of land are legally entitled to use or occupy their land for any purpose for which it may in the ordinary and natural course of the enjoyment of land be used or occupied, and they are not responsible for damage sustained by the property of others through natural agencies operating as a consequence of such ordinary and natural user or occupation. Where, however, the roots, branches, or leaves of trees or shrubs encroach upon the land of an adjoining owner and there cause damage to either his property or cattle, an action for nuisance will lie irrespective of whether the trees were planted or self-sown.

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In Sedleigh-Denfield v. O'Callaghan 1940 A.C. 880, to which we propose to make several references, the House of Lords settled some previously controversial aspects of this branch of the law. We would start with the definition given by Lord Atkin at p. 896 : "I think that nuisance is sufficiently defined as a wrongful interference with another's enjoyment of his land or premises by the use of

"land or premises either occupied or in some cases owned by oneself". The question, of course, that immediately arises is when an interference is "wrongful". In Sedleigh-Denfield's case the nuisance on the defendant's land, or more accurately the work which subsequently caused the nuisance, had not been created by the defendant, but by a local authority who, so far as the defendant was concerned, was a trespasser. However, for some years before trouble occurred the defendant knew of the work done, and knew or ought to have known of the likelihood of the work causing damage to his neighbour in times of severe rain. The House of Lords held the defendant liable on the ground that he had "continued" a nuisance, although he had not created it. Lord Maugham said at p.894 : "In my opinion an occupier of land 'continues' a nuisance if with knowledge or presumed knowledge of its existence he fails to take any reasonable measure to bring it to an end though with ample time to do so". And Lord Atkin said at p. 897 : "Deliberate act or negligence is not an essential ingredient but some degree of personal responsibility is required, which is connoted in my definition by the word 'use!.....It seems to me clear that if a man permits an offensive thing on his premises to continue to offend, that is, if he knows that it is operating offensively, is able to prevent it, and omits to prevent it, he is permitting the nuisance to continue; in other words he is continuing it". Now if this be so when the work was originally done by a trespasser it must be all the more so when the original work was done by a predecessor in title of the defendant, as was the position here with the planting of the trees. The fact the nuisance may arise from the natural growth of trees does not afford a ground for exemption from liability. In Davey v. Harrow Corporation 1958 1 Q.B. 60 a case came before the Court of Appeal in which a house-owner claimed damaged from the Corporation because the roots from a number of elm trees, upwards of 80 years old and growing along the boundary of a proposed cemetery site vested in the Corporation, had caused extensive damage to the plaintiff's house. There had been settlement of the foundations as the result of the roots extracting the moisture from the soil on which the house stood. Counsel for the Corporation argued that there had been no "continuance" of the nuisance because nothing active had been done: "one does not continue a nuisance by just admiring it". The Corporation was nevertheless held liable. So far as the present appellant's knowledge is concerned, he has never pretended to deny that he knew the roots from his trees were invading his neighbour's wall. Prima facie, then, liability must follow. The appellant, indeed, has said that he knew of the intrusion of the roots into the wall for years before the respondent bought her property, and, moreover, it appears that he knew that the roots had blocked his then

neighbour's drains some years before the respondent's purchase. What he stressed in his argument before us was that the spread of the roots had become so obvious that the position must have been plain to the respondent when she bought in 1955, and he went on to argue that the respondent was not entitled to claim in respect of damage which had then already taken place. We turn to consider this contention.

This topic relates to the respondent's claim for damages rather than to any right she might have to an injunction. The damages awarded totalled £626, of which amount £556 represented the actual cost incurred by the respondent in installing new drains and £70 represented the learned Judge's assessment of what, in all the circumstances, the appellant should pay towards the cost of repairing the wall. It will be seen that the damages were assessed, for much the greater part, in respect of injury to the drains. Mr. Kent agreed that the respondent could not recover in respect of damage which had already manifested itself at the time she purchased the property, and we proceed to consider the matter on this basis. He claimed, however, that the damage to the drains had not then manifested itself so as to have become known to the respondent. In her evidence the respondent maintained that she remained unaware of the blockage of the drains, let alone damage thereto, until 1958. It became clear from the correspondence produced that the respondent must have known of the blockage of her drains by roots from the appellant's trees in 1956, and in the course of his judgment the learned Judge commented adversely on her lack of frankness in this and another matter, and declined to accept her statement that she remained in ignorance until 1958. The question, however, is whether the respondent bought in 1955 with knowledge that the drains themselves must then have been damaged, and there is no evidence that this was so. Notwithstanding the strictures made by the appellant, not without justification, as to the respondent's reliability as a witness, it does not follow, and a Court would not be entitled to say that it followed, that the respondent bought the property with knowledge that the drains were damaged. Indeed, although there was some evidence of blockages in 1952, 1955, and 1956, there is really no evidence that the drains became fractured by the roots until well after the respondent's purchase, perhaps not until 1958. The mere fact that the respondent should have known, or did know, at the time she bought her property that there was root intrusion of some sort is not enough to deprive her of the right to damages for injury which afterwards arose. In Davey v. Harrow Corporation the roots from the elm trees already encroached on the plaintiff's property when he bought it, because the builders had cut away the roots in order to lay the foundations and drains for the house. That fact did not prevent the plaintiff from

recovering in respect of damage arising some 10 years later by reason of the further growth of the roots. So, here, we are of opinion that any knowledge the respondent may have had, or should have had, as to the spreading of the roots on to her property in 1955 cannot prevent her from recovering in respect of damage subsequently arising and manifesting itself by the roots fracturing her drains.

Both in his evidence in the Supreme Court and in his address to us the appellant complained, with some feeling, that he had not received from the respondent the co-operation that should exist between neighbours. The substance of his complaint, as we understand it, is that trouble to the drains would have been avoided if the respondent had cleared the roots from her drains and kept them clear, if necessary by using chemicals, in the manner which we gathered the appellant himself had employed in connection with his own drains. We shall deal shortly with this point in case it be thought to have been overlooked. The law confers on one who is aggrieved by a nuisance certain rights to abate the nuisance, but these are rights only and there is no duty placed on the aggrieved person to abate the nuisance or to continue abating it from time to time. Insofar as the appellant's present complaint has relevance, it must be on the broader ground that the respondent failed to take reasonable steps to mitigate the damage which she was sustaining. Viewed from this broader aspect, we do not think it can be said that the respondent failed to observe her obligation to mitigate the damage. The evidence of her plumber, which we have already summarised, shows that reasonable steps were taken to clear the drains from time to time, but finally it became apparent that this was no longer sufficient to obviate the damage that was developing.

So far as concerns the £70 allowed for repairing the wall, we think the learned Judge took into account all matters in the appellant's favour which could properly be allowed in assessing the amount for which the appellant might fairly be held responsible. In respect of the £556 allowed for the installation of the new drains, the position is not so clear. This work was carried out by the respondent after the proceedings were instituted but before the action was heard, but we do not think it can be said that the respondent acted precipitately in having the work done. It would have been more satisfactory had the evidence reconciled the quotation given by the plumber in March 1960 with the work actually done some months later, a matter which Mr. Holmes, a valuer called for the appellant, found difficult to reconcile. Moreover, the respondent got new work for old, but here again this matter was not examined in the evidence. We think the learned Judge was quite entitled to disregard the estimate of £270 put forward by Mr. Thomas. Notwithstanding the deficiencies in the evidence on this topic, which we have

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mentioned, the fact remains that the respondent did pay £556 for the work, and we think the principle to be applied is that the Court should be slow to interfere with the cost of work done pursuant to the advice of a competent adviser : Lodge Holes Colliery Co.Ltd. v. Wednesbury Corporation 1908 A.C. 323 at p.325. In these circumstances we do not think it has been made out that the amount of damages awarded against the appellant was excessive, particularly when regard is had to the fact that Mr.Holmes estimated the cost of carrying out remedial work along different lines at £600.

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Finally we come to the order made against the appellant that he "remove the pohutukawa trees and that he "remove from the land of the plaintiff the roots of such "trees or otherwise destroy or render them impotent". The learned Judge made this order because he was of opinion that the evidence showed that, without an injunction, there was likely to be a repetition of the wrong, and that if the wall was to be preserved the trees must go. The appellant's objection to this order was that it ignores the fact that it is improbable that any further damage will be caused from the roots now that the drainage block has been abandoned, and a new drainage system installed. A reading of the evidence shows that frequently the witnesses spoke of the likelihood of damage to "the wall" in general terms, without drawing any distinction between damage to the drainage block if the drains embedded therein had remained in use, and damage to the lower wall if the use of these drains were abandoned. In considering this matter, it becomes important to bear this distinction in mind, because the justification for an injunction must rest on the ground that if the trees are permitted to remain their roots will damage the respondent's wall, although the drains in the drainage block are no longer used.

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Having carefully considered the evidence as a whole with this distinction in mind, we think the matter may be dealt with quite briefly. In saying this, we do not minimise the importance to the appellant of the removal of his trees, but at the same time we do not think any advantage is to be gained by reproducing extracts from the evidence. There are passages in the evidence of Mr.Davies and Mr. Orchiston which clearly support the view that the removal of the trees is necessary. What is more important, however, is that the same conclusion emerges from the evidence of the witnesses called for the appellant. We do not include Mr. Morrison, because he had not seen the property after the new drains were installed and probably did not direct his mind to

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the particular problem presented by the situation as it now exists. But Mr. Holmes, Mr. Sterling, and Mr. Clendon all agreed that the trees could not remain without the likelihood, if not the inevitability, of further damage. In these circumstances we think the learned Judge was justified in making the order he did, and this Court would not be entitled on the evidence to interfere with that order. It may be hoped that the removal of the trees will not mean that the appellant's fears as to the disturbance of the stability of the area will be realised, and in this connection we note Mr. Sterling's observation that if the trees are killed the roots will not produce new roots.

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For the foregoing reasons the appeal is dismissed, and the appellant is ordered to pay the respondent's costs, which we fix at £75.

Solicitors :

For the Respondent: Buddle, Anderson & Kent, WELLINGTON.

IN THE COURT OF APPEAL OF NEW ZEALAND

No. C.A. 31/61

BETWEEN CHARLES MORGAN

Appellant

AND NAJO A. KHYATT

Respondent

FORMAL ORDER OF COURT OF APPEAL JUDGEMENT

Before THE HONOURABLE MR. JUSTICE K.M.GRESSON

President

THE HONOURABLE MR. JUSTICE NORTH

THE HONOURABLE MR. JUSTICE CLEARY.

Monday the 7th day of May 1962.

UPON READING the Notice of Motion on Appeal and
UPON READING the Case on Appeal filed herein and
UPON HEARING the Appellant in person and Mr. Kent
Counsel for respondent

THIS COURT DOTH ORDER that the Appeal BE DISMISSED
with costs for the respondent £75.

L.S.

By the Court
E. A. Gould
Deputy Registrar

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EXHIBITS "B"

(C O P Y)

4th August, 1958.

Messrs. Duncan, Matthews and Taylor,
Solicitors,
P.O.Box 5003,
WELLINGTON.

Dear Sirs,

re: Khyatt v. Morgan.

As you know, we act for Mrs.N.A.Khyatt and we have to inform you that our client's property has suffered further damage in that the concrete wall on the boundary line maintaining soil from falling into her property has been cracked and broken as the result of roots from boundary trees or hedges protruding and forcing their way into the concrete facing.

The position is even more serious in that it now appears that the drain, which runs down that side of the bounda y, has been broken also as the result of similar roots and trees from your client's property forcing their way through the pipes. We understand the position has been inspected by an Officer of the City Council, and it has been examined by a Drainlayer acting pursuant to our client's instructions. We intend to obtain estimates as to the cost of necessary repairs to both the wall and the drain and, as soon as these estimates are available, we shall communicate with you again.

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Yours faithfully,

BUDDLE, ANDERSON, KENT & CO.

Per: _____

EXHIBITS "C"

(C O P Y)

7th October, 1959.

Mr. C. Morgan,
314 Oriental Parade,
WELLINGTON.

Dear Sir,

We have been consulted by Mrs. N.A. Khyatt with regard to the damage which has been done to the drains which run down the south boundary line and in respect of which urgent repair work is required.

You will remember that we wrote to your Solicitors on the 4th August, 1958, drawing attention to the damage which has been done to the concrete wall on the boundary and to the fact that the drain had then been broken as a result of roots and trees from your property forcing their way through the pipes. On that occasion, the position has been inspected by an Officer of the City Council and a report was obtained to the effect that the damage was caused through the roots of trees protruding into our client's property and damaging the drains and it was apparent to anyone making an inspection that a similar condition obtained with regard to the concrete wall. 10

A further crisis has now arisen and the drains have been broken and spoil disburshed all over the path as a result of roots from these trees again causing serious damage to those drains. We are now having an estimate made of the cost of repairing these drains and it is proposed to sue you for the cost. We also propose to issue proceedings by way of injunction or otherwise to compel you to remove these trees upon the further grounds that they are now threatening the stability of the concrete wall on our client's property and have done and continue to do serious damage thereby. You cannot complain that you have not been fully advise of these consequences and you must accept the responsibility for negligence in this respect. There are courses of action available to our client on the grounds of negligence/and/or nuisance and she proposes to exercise these without further ado. If you wish to avoid legal proceedings, it will be necessary for you to remove the trees which are causing the trouble and to undertake the cost of repairing the drains which have been also adversely damaged in the way we have indicated above. The matter is urgent and serious. 20 30

Yours faithfully,
BUDDLE, ANDERSON, KENT & CO.

Per.....

EXHIBITS "D".

314 Oriental Parade,
WELLINGTON.

10th October, 1959.

Messrs. Buddle, Anderson, Kent and Co.,
P.O.Box 233,
WELLINGTON.

Dear Sirs,

Acknowledging your letter of the 7th, apparently I must again remind your client that the defective drainage and cracks in the "wall" have existed for many years and these problems were well known to her when she purchased the property.

They existed even before I became owner of 314, and it cannot be said that I have caused any damage to your client myself and I doubt that trees on my boundary had anything to do with the original damage.

In any case, I am having the drainage and the wall examined in detail by competent authorities and if your client thinks to put responsibility on me, the matter must be settled in Court before any work is done. 10

In the meantime, there is a simple maintenance routine available to your client that most hill-side property owners use that eliminates any need to sacrifice trees or to pester neighbours with threatened law-suits.

The sudden emergency you refer to had nothing to do with the trees on my property, the nature of the blockage was identified by the Inspector for the Health Department and was probably a direct result of a party given in one of your client's flats the night before by her departing tenants. 20

Yours faithfully,

(sgd.) C.Morgan.

EXHIBITS "E".

(C O P Y)

16th March, 1960.

Mr. C. Morgan,
314 Oriental Parade,
WELLINGTON.

Dear Sir,

re Khyatt v. You.

As we have indicated previously, our client is proposing to take proceedings holding you liable for the damage which is being done as the result of roots from trees on your section protruding and causing very great damage to her drains and concrete wall.

When we last wrote to you on the 7th October, 1959, the writer misunderstood his instructions and thought the cost of repairing the damage that had been done to the drains and concrete was the sum of £266. 4. 9. It now transpires that the damage is very much more extensive and the most recent estimates indicate that the following sums will have to be expended in order to restore the drains and concrete wall to a serviceable and safe condition of repair:-

10

- | | | | |
|----|--|------------|----|
| 1. | Removing the roots and reconstructing the drains | £358. 0. 0 | |
| 2. | Renewing defective storm-water drains with cast-iron pipes and fittings
Estimate | £198. 0. 0 | |
| 3. | Renewal of existing boundary concrete wall between 314-316 Evans Bay Road (the wall to be reinforced concrete with fittings approved by the Wellington City Council) | £850. 0. 0 | 20 |

We bring these matters to your notice because if you feel that you are able to obtain other estimates at a lower cost, our client would be more than willing to consider them. Such consideration would be dependent only upon the reliability and financial stability of the tenderers.

The position is very serious in that with the approach of winter something urgently must be done to put the drains and the concrete wall in order. We shall, therefore, leave the matter in abeyance for a period of ten days and you are at liberty to have the drains and/or the concrete wall inspected by any person of your choosing and to obtain any estimates for the work that will have to be done to restore them.

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EXHIBITS "E"

Page 2. (cont)

Please also take notice that it is not now intended to continue with the summons which has already been issued in the Magistrates' Court because, in the event of your failure to undertake the work of restoring the drains and the wall or to accept liability therefor within a period of ten days, proceedings will be issued in the Supreme Court seeking similar remedies by way of injunction and damages in the total sum of £1,406. 0. 0

Yours faithfully,

BUDDLE, ANDERSON, KENT & CO.

Per.....

EXHIBITS "F".

29th Oct.1960.

INVOICE. NO.600

Mrs.N.A.Khyatt,
316 Oriental Parade,
WELLINGTON.

Dr. to E.G. DAVIS
Registered Plumbing Contractors
32 Buckingham St., W.E.3.

LICENSED DRAINLAYERS.

To renewing faulty sewer drain as quoted	£358. 0. 0
To renewing stormwater drain as quoted	£198. 0. 0
	<u>£556. 0. 0</u>
	£200. 0. 0

Attached is Receipt No. 183 21.3.61

Received from Mrs. N.A.Khyatt
Three Hundred and fifty-six Pnds.

£356. 0. 0.

E.G.Davis.

STATEMENT

20. 2.61

Mrs. N.A.Khyatt
316 Oriental Parade

Dr. to E.G.DAVIS
Registered Plumbing Contractors

1960 October 29th To Account Rendered £556. 0. 0

Attached is Receipt No.170 26.2. 61

Received from Mrs. N.A.Khyatt

Two Hundred Pounds on account.

E.G.Davis.

EXHIBIT "I".

7. 8. 58.

From Mr. Canham

re: 316 Oriental Parade.

Re Solicitor's letter concerning
damage to drains.

To the C.H.I.

A concrete retaining wall extends up hillside from roadway to dwelling side at 316 Oriental Bay. The wall divides the property from 314 Oriental Bay.

Both the sewer and stormwater drains are encased in the concrete of this wall.

Roots from vines and trees growing in 314 Oriental Parade have penetrated and fractured the concrete of wall for a distance of approximately 100 ft.

10

The roots have also damaged both sewer and storm-water drains.

A considerable portion of the retaining wall will have to be re-built.

This will necessitate re-laying a considerable section of sewer and storm-water drain.

In any case the drains are past repairing in places.

W.E. Canham. 7.8.58.

EXHIBIT "J".

Letter from: Mr. A.B. Sievwright,
 Southern Cross Bldgs.,
 22-24 Brandon St.,
WELLINGTON.

29th March, 1957.

Mrs. N.A. Khyatt,
 136 Evans Bay Rd.,
WELLINGTON.

Dear Madam,

The decision of the Court is that a fence be erected between your property and that of Mr. Morgan on the correct boundary line. The fence directed is that set out in the Second Schedule of the Fencing Act, Part 1, No. 3, and is as follows:-

Any paling fence at least 3ft 9" in height, with posts and two rails, and having slit or sawn timber placed upright and well nailed to both rails, there being not more than 4" of opening between each upright piece of timber.

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The Magistrate indicated that he had no power under the Act to direct that the fence have a base of concrete up to a level with the high land on Mr. Morgan's side of the boundary line. That can be done only by agreement. This concrete would of course be of advantage as it would be a permanent erection and the earth banking up against a wooden fence would result in rotting of the timber in a few years. If any agreement is come to between you and Mr. Morgan it should be committed to writing so that there will be no mistake as to what is agreed upon.

20

As the fence is to be erected on the correct line, the line of hedge plants will it seems have to be removed or shifted back on Mr. Morgan's land. In addition if there are any of Mr. Morgan's drains on your land it seems that he should move them back on to his side of the boundary.

Yours faithfully,

(Signed) A.B. Sievwright.

EXHIBIT 3.BUDDLE, ANDERSON, KENT & CO.,Bethune's Buildings,
154 Featherston St.,
WELLINGTON.

11th May, 1960.

Messrs. Duncan, Matthews & Taylor,
Solicitors,
P.O. Box 5003,
WELLINGTON.

Dear Sirs,

re Mrs. N.A. Khyatt v. C. Morgan.

Pursuant to our conversation yesterday we now have to advise you that we are more than willing to make discovery without the necessity of your applying for an order.

We assume that you are in possession of the correspondence which was addressed to Mr. Morgan in connection with the alleged damage:-

1. A letter dated the 4th August, 1958.
2. A further letter addressed to Mr. Morgan dated 7th October, 1959.
3. A letter from Mr. Morgan to our firm dated 10th October, 1959. 10

So far as the damage and the estimated cost of repair is concerned our client would depend upon:-

1. The evidence from Mr. E.G. Davis who is a plumber of 32 Buckingham Street, Melrose, and whose quotation for the work of repairing the sewer drains was the sum of £358.
2. So far as the concrete wall is concerned we have the evidence of a reputable contractor reinforced by Mr. Bruce Orchiston who considers that in order to repair the wall of comparable standard, expenditure to the sum of £170 would be required. 20
3. We also have been advised that the cost of renewing the storm-water drains would be the sum of £198.

EXHIBIT 3.Page 2.(continued)

By way of expenditure may we say that we originally had a report from a Contractor to the effect that the sum of £850 would be required to meet the cost of renewing the existing boundary concrete wall to the City Council specifications. However, Mr.Orchiston has reported that some of the concrete wall was not of a particularly high standard and in all the circumstances we have to advise that our client would not expect to recover the cost of a completely satisfactory re-inforced concrete wall to replace the wall of a lower standard which existed there before and this accounts for the revision of the estimate from £850 to £170. In our letter to Mr. Morgan on the 16th March, 1960 which he has no doubt handed to you you will see that an estimate of £850 was mentioned as the sum required to restore the concrete wall. We may say that the condition of the drains and the wall was inspected by an Inspector of the Wellington City Council and we also have photographs showing the damage to the wall and to the drain. 10

Mr. Orchistons quotation was not reduced to writing but was given to the writer verbally and the same applies as far as Mr.Morgan is concerned, but, however, these estimates can be reduced to writing if you so require. 20

We may say that the Photographs, Mr.Orchistons plan and the correspondence (or any part that you do not have) is available for your inspection at any time.

Yours faithfully,

BUD DLE, ANDERSON, KENT & CO.,

Per: George C. Kent.

EXHIBIT 4.

A.B. SIEVWRIGHT.
Barrister and Solicitor.

The Southern Cross Bldgs.,
22-24 Brandon Street,
WELLINGTON. O.1.

12th May, 1952.

Mr. Charles Morgan,
314, Oriental Parade,
WELLINGTON.

Dear Sir,

I have been consulted by Mrs. M.H. Livingston the owner of a property at No. 316 Oriental Parade, which adjoins property belonging to you. Recently a blockage occurred in the sewer drain on my client's land. She was required by the City Council to have it cleared. When the sewer was opened it was discovered that the blockage was due to the intrusion of roots of Pohutukawa trees growing on your land. You have permitted this nuisance to cause the damage. When it was brought to your notice you admitted your liability by offering to pay for half the cost of repairs. 10 My client considers that you should pay the full amount.

The civil and structural engineer who inspected the site has supplied a report in which it is stated that in addition to the blockage referred to the "sewer drain, together with other service pipes, is embedded in a concrete wall along the south boundary of the property. This wall shows obvious signs of deterioration through pressure from root growth". And the recommendation is that it is essential that this root growth be removed if further damage to the wall and drain services is to be avoided.

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Please inform me whether you are prepared to reimburse my client for the whole of the expense to which she is being put in clearing the sewer and whether you are prepared immediately to take steps to restore the wall and to prevent further damage.

Yours faithfully,

"A.B. Sievwright".

EXHIBIT 4. contdA.B. SIEVWRIGHT.

Barrister and Solicitor.

The Southern Cross Bldgs.,
22-24 Brandon St.,
WELLINGTON. C.1.

29 March 1956.

Messrs. Duncan, Matthews & Taylor,
Solicitors,
140 Lambton Quay,
WELLINGTON.

Dear Sirs,

re Mrs. Khyatt v. Morgan.

Your letter of 16th March was received.

It did not take the dispute any nearer to settlement.

A reply would have been forwarded previously but it was considered that a full inspection and an expert's report would be of advantage before further consideration.

All this has now been done and as a consequence a more comprehensive notice has been sent by registered post to your client who no doubt will refer it to you.

The essential work entailed in putting the boundary in satisfactory order will be more extensive than at first appeared to be the position and your client's liability for damage done seems inescapable.

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Yours faithfully,

"A.B.Sievwright".

EXHIBIT 4. contd.

A.B. SIEWWRIGHT
Barrister and Solicitor.

The Southern Cross Bldgs.,
22-24 Brandon St.,
WELLINGTON. C.1.

24th May, 1956.

Messrs. Duncan, Matthews & Taylor,
Solicitors,
WELLINGTON.

Dear Sirs,

re Mrs. Khyatt v. Morgan.

With reference to my telephone conversation this morning I confirm my intimation to you that the survey prepared by Mr. Hanify is available for you at any time.

It confirms what was inferred in the notice to your client of 29th March, viz: "A new fence is required on the correct line and the wall will require repair."

I shall be glad to submit to my client any proposal of your client to put the matter on a proper basis.

So that there is no delay my client has instructed me that a further application under the Fencing Act be filed and that is being done to-day based on the notice of 29th March. The previous application will if necessary be withdrawn. My client quite appreciates that other proceedings may be necessary in respect of the repairing of the damage to her walls and drains caused by your client's trees unless your client is prepared to make good that damage.

Yours faithfully,

"A. B. Sievwright".

EXHIBIT 4. contd.

DUNCAN, MATTHEWS & TAYLOR.

140-150 Lambton Quay,
WELLINGTON.

Barristers and Solicitors.

28th May, 1956.

A.B.Sievwright, Esq.,
Solicitor,
22, Brandon Street,
WELLINGTON.

Dear Sir,

re Khyatt and Morgan.

We thank you for allowing us to inspect survey plan made by Messrs. H.P.Hanify & Son on the 7th and 16th May, which is returned herewith. We shall take an early opportunity to discuss with our client the various matters now calling for consideration, after which we shall communicate further with you.

Your letter of the 24th May makes reference to damage to your client's drains, alleged to be caused by our client's trees. This is the first reference to damage to drains in the correspondence or proceedings and we shall be glad if you will give us further particulars.

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In our letter to you of the 9th April, it was suggested that you let us have a copy of the expert's report upon which you rely. We shall be glad to know whether you are prepared to act upon this suggestion.

Yours faithfully,

DUNCAN, MATTHEWS & TAYLOR.

EXHIBIT 4. contd.

A. B. SIEVWRIGHT.
Barrister and Solicitor.

The Southern Cross Bldgs.,
22-24 Brandon St.,
WELLINGTON. C. 1.

31st May, 1956.

Messrs. Duncan, Matthews & Taylor,
Solicitors,
WELLINGTON.

Dear Sirs,

Mrs. Khyatt v. Morgan.

I am in receipt of your letter of 28th May and I note that you desire to discuss the position as disclosed in the surveyor's plan with your client. It is assumed that you may make proposals in regard to the erection of a suitable fence on the correct line in a manner that will give support to the higher ground of your client's land.

In regard to my client's wall and drains damaged by your client's trees the positions can be examined without difficulty. The expert's report obtained by my client is part of her case and is not available for your inspection. It will be used in evidence if required and it is suggested that your client himself may take steps to obtain an independent report.

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It would appear that although the Court application for a fencing order is set down for hearing on Friday next the matter should be adjourned till your client's decision is available. Do you agree to the hearing being adjourned for a fortnight that is to 15th June or any other convenient date?

Yours faithfully,

"A. B. Sievwright"

(C O P Y)

EXHIBIT 4. contd.

A.L. ROBERTSON, F.Q.S.I.N.Z.

F. A. I. S.

QUANTITY SURVEYOR.9 Lower Watt Street,
Highland Park.

28th March, 1956.

A.B. Sievwright,
Solicitor,
WELLINGTON.

Dear Sir,

KHYATT v MORGAN.

As instructed I have again examined the fence line and dividing walls between the properties of Mrs. Khyatt and Mr. Morgan at Nos. 316 and 314 Oriental Parade and I report as follows:-

(1) WOOD FENCE:

For approx. 60'0" the old wooden fence has been practically dismantled by the removal of rotten timber. It was originally erected of 5" x 3" posts and timber sheeting. The sheeting was in general rotten and the few posts remaining in some instances encroach 7" on Mrs. Khyatt's property. Mr. Morgan's land is about two feet higher than Mrs. Khyatt's and the fence was built either to sustain the filling of Mr. Morgan's property or in the course of time the filling has been built against it. Accordingly it will be necessary to excavate a strip of earth approx. 6" wide to allow the sheeting and posts to be rebuilt on the correct boundary. Further trouble is caused by a line of shrubs forming a live hedge planted along the edge of the filling on Mr. Morgan's property. The hedge encroaches on Mrs. Khyatt's land and has now grown so that one half of its foliage extends approx. 12" on Mrs. Khyatt's property, and is gradually getting worse. The area between Mrs. Khyatt's residential building of flats and the boundary is approx. 3'3" wide and forms the passage and the main entrance to the front flat and also to the entrance to the back flat. The encroachment of the filling plus the hedge greatly reduces this access. It is my opinion that this live hedge should be moved further away from the boundary as in its present position it will cause endless trouble not only in its lateral growth but also the spreading of its roots. It was planted altogether too close to the boundary line and indeed appears in places to be right on it. I would recommend that after the filling is trimmed back to the correct boundary line a new wall be erected of reinforced concrete with a 9" x 6" footing and a 5" or 6" thick wall approximately 3'0" high from the bottom of the footing to the top of the wall.

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EXHIBIT 4 contd.Page 2. (continued)(2) SLOPING WALL:

From a distance of 42'3" from the street frontage for a length of approx. 106'6" measured, on the slope a concrete retaining wall has been built on Mrs. Khyatt's land. This wall varies in height of 2'0", 4'6", 6'6", 7'6" and 6'0" and is built on Mrs. Khyatt's property to act as a retaining wall where it was necessary to construct her concrete steps and ramps and also the top portion to act as the drainage conduit.

Mr. Morgan's drainage conduit is alongside but slightly lower than that of Mrs. Khyatt's. Along Mr. Morgan's boundary on his land have been planted trees and shrubs and in the course of time the roots of the trees and shrubs have spread out beneath Mr. Morgan's drain and burst the concrete wall on Mrs. Khyatt's property and have even broken into her drain pipes and the roots have along the whole length of the drain created blockages in the drains. The whole length of the wall has been burst and the gap varies from 1" to 3". This gap is also filled completely with shrub and tree roots and is increasing in danger as time goes on and the roots thicken and grow. This wall has also vertical bursts and it is now necessary to have the work put right and the cause of the trouble removed. This work, which should be at the expense of Mr. Morgan who has caused the damage, can in my opinion be properly and satisfactorily carried out by the following methods:-

- (a) Trees and shrubs to be taken out
- (b) Roots of trees and shrubs to be removed from Mrs. Khyatt's drain and pipes to be repaired where necessary.
- (c) Roots of trees and shrubs to be removed from the cracks in Mrs. Khyatt's concrete wall, the cracks then to be grouted and filled with gunite or closely packed with 4.2.1 concrete in liquid form and the surface smoothed to conform with the existing concrete.

Yours faithfully,

A. L. ROBERTSON.

EXHIBIT 4. contd.TO:-

Mr. Charles Morgan,
Occupier of Residential property at No. 314 Oriental Parade,
WELLINGTON.

TAKE NOTICE that the fence and wall along the boundary between your property as above described and the adjoining land of which I am the owner, viz. No. 316 Oriental Parade, Wellington, requires renewal, repair and/or re-erection as they are in places on the wrong line and encroach on my land, in other cases they are out of repair and elsewhere in a damaged and dangerous condition owing to the fact that roots of trees or shrubs planted and growing on your property have grown under the foundation of your own wall and have broken the concrete boundary wall on my property and I require that the work be carried out, on such basis as may be agreed upon between us and in default of agreement as may be determined in accordance with Statutory provision, for the repair, straightening, renewal, and/or renovation of the said fence and boundary wall the work to be carried out in the following manner:-

10

(1) Sloping wall:-

From a distance of 42'3" from the street frontage for a length of approx. 106'6" this wall is to be made good by the removal of all roots of trees and shrubs from my property and to be so treated that they will not cause further trouble in the future and the continuous gap in the concrete caused by these roots, etc., and approx. 3" in height and the full thickness of my wall and this gap in concrete to be grouted out cleanly and filled in with "Gunitite" or closely packed with 4. 2. 1. concrete in a semi-liquid manner and thoroughly tamped and finished similarly to the existing surfaces.

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(2) Fence line:-

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From the top of the sloping wall referred to in paragraph (1) hereof along the boundary going in an easterly direction for 60 feet the remaining fence posts of the old wooden fence to be dismantled and your filling encroaching on my land together with the live hedge to be removed to enable the fence to be re-erected on the correct line (using such material of the old fence as is sound); AND also a strong wall preferably of reinforced concrete to hold away the filling on your land from the fence to be erected along the same line.

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THIS NOTICE IS GIVEN UNDER THE FENCING ACT, 1908.

DATED this 29th day of March, 1956.

EXHIBIT 4 contd.

IN THE MAGISTRATES' COURT

HELD AT WELLINGTON.

IN THE MATTER of the Fencing Act 1908
and its amendments

AND

IN THE MATTER of a dispute as to
re-erection and/or repair of
a fence

BETWEEN NAJLO ANGELINE KHYATT
of Wellington Widow

APPLICANT

AND CHARLES MORGAN of
314 Oriental Parade, Wellington
Dealer

RESPONDENT

TAKE NOTICE that Counsel on behalf of the above named
applicant WILL MOVE before a Stipendary Magistrate at
the Magistrates' Chambers at Wellington on Friday the
1st day of June 1956 at the hour of 9.30 o'clock in the
forenoon, for an ORDER DETERMINING a dispute as to the
re-erection of a fence between the properties of the
parties to this application which properties are
described in the notice, a copy of which is attached
hereto.

DATED at Wellington this 24th day of May, 1956.

A.B. Sievwright
Solicitor for the Applicant

TO The Registrar, Magistrates' Court, Wellington

AND TO The above named respondent.

IN THE COURT OF APPEAL OF NEW ZEALAND

No. C.A. 31/61

BETWEEN CHARLES MORGAN

Appellant

AND NAJO. A. KHYATT

Respondent

ORDER OF THE COURT OF APPEAL

GIVING FINAL LEAVE TO APPEAL TO HER MAJESTY IN COUNCIL

Before THE HONOURABLE MR. JUSTICE K.M.GRESSON
President

THE HONOURABLE MR. JUSTICE NORTH

Friday the 24th day of August 1962

UPON READING the Notice of Motion filed herein AND
the Affidavit of the Appellant sworn and filed in
support thereof

AND UPON HEARING the Appellant in Person and Mr. R.B.Cooke
for the Respondent

THIS COURT DOTH ORDER that the Appellant do have

FINAL LEAVE to Appeal to Her Majesty in Council from
the Judgment of this Honourable Court pronounced herein
on the 7th day of May 1962.

By the Court

A.W. KELLY
Deputy Registrar

CERTIFICATE OF REGISTRAR OF COURT OF APPEAL

AS TO ACCURACY OF RECORD.

I, GERALD RONALD HOLDER Registrar of the Court of Appeal of New Zealand
DO HEREBY CERTIFY THAT the foregoing pages of printed matter, numbered continuously from number 23 to number 166, contain true and correct copies of all the proceedings, evidence, judgements, decrees and orders had or made in the above matter so far as the same have relation to the matters of Appeal and also correct copies of the reasons given by the Judges of the Court of Appeal of New Zealand in delivering judgement therein, such reasons having been given in writing.

AND I DO FURTHER CERTIFY THAT THE Appellant has taken all the necessary steps for the purpose of procuring the preparation of the Record and the despatch thereof to England and has done all other acts matters and things entitling the said Appellant to prosecute this Appeal.

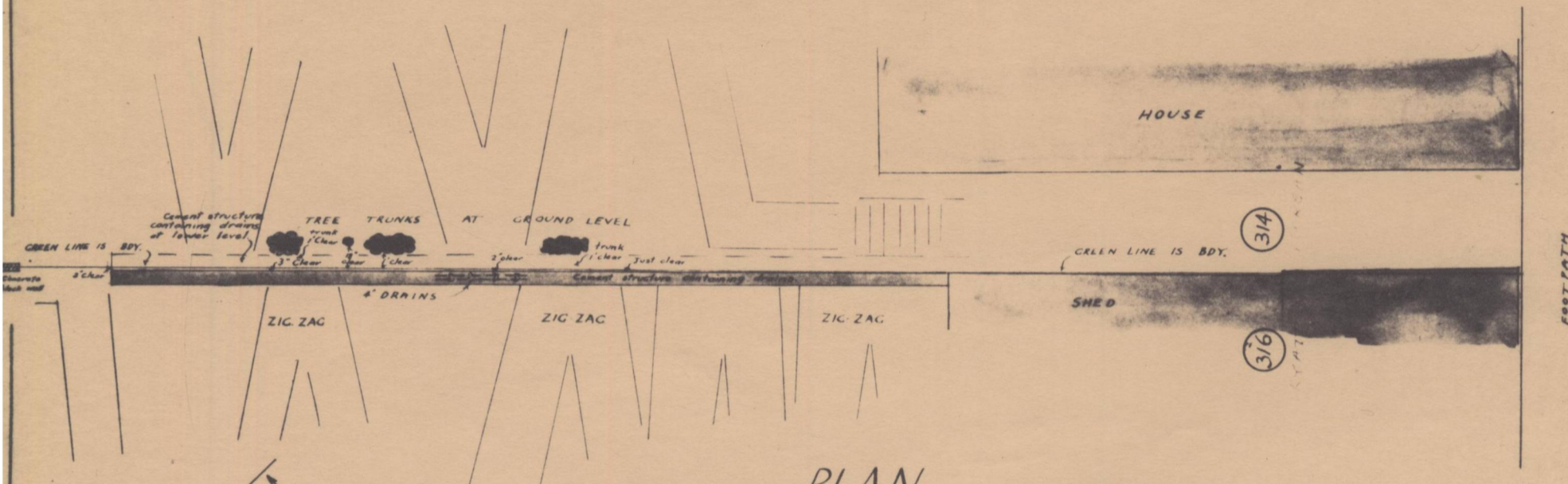
AS WITNESS my hand and Seal of the Court of Appeal of New Zealand this 12th day of ~~August~~ ^{October} 1962

G. R. HOLDER

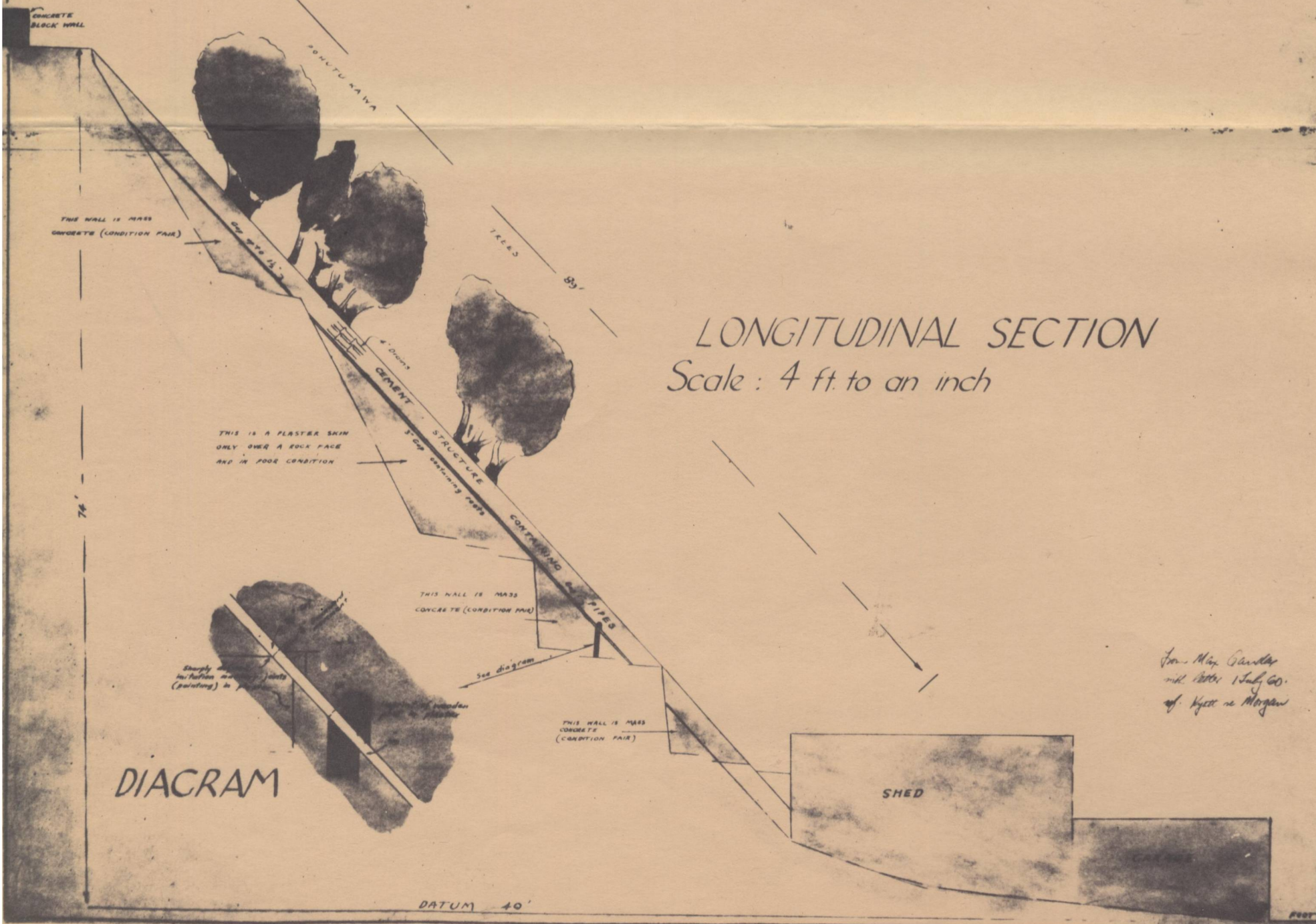
L.S.

Registrar.

PLAN & LONGITUDINAL SECTION of
BOUNDARY BETWEEN NOS 314 & 316
ORIENTAL PARADE



PLAN
Scale: 4 ft. to an inch



LONGITUDINAL SECTION
Scale: 4 ft. to an inch

DIACRAM

DATUM 40'

John Min Gaudin
with Peter J. G.
of Hest & Morgan