



LTD., J.C. CONCRETE LTD., C.J. RENTAL & )  
CONTRACTING LTD., JOE HOLLAND, JOE )  
HOLLAND RENTALS and JOE HOLLAND INC., )  
)  
Defendants, )  
- and - )  
)  
JOE HOLLAND RENTALS and JOE HOLLAND )  
INC., )  
)  
Third Parties. )

**McCawley, J.**

[1] The plaintiff, Boachanh Ngo, sues in her personal capacity as the registered owner of 305 Arlington Street in Queen's Bench Suit No. CI 94-01-82652. In a parallel action she also sues as the sole director, officer and shareholder of the plaintiff corporation in Queen's Bench Suit No. 94-01-82653. Shofu Crown and Bridge Dental Laboratory Ltd. is the registered owner of 301 Arlington Street. Mrs. Ngo (hereinafter referred to as the plaintiff) says that extensive damage was caused to 301 and 305 Arlington Street as a result of road construction and repair work carried out by the City of Winnipeg in 1992 and 1993. She claims the cost of repairing the damage done or alternatively the diminution in value of the two properties as well as loss of rental income. Her claim for severe emotional and mental distress was abandoned at trial.

[2] The evidence disclosed that in August and September 1992 Darco Enterprises and its subcontractor, Joe Holland Rentals, carried out repairs on

behalf of the City in the lane on the south side of 301 Arlington and near the garage of 305 Arlington. The plaintiff claims that the heavy equipment used in the construction resulted in vibrations of such a magnitude that they caused cracking of the house at 301 and the garage at 305.

[3] The plaintiff also says that construction work carried out by C.J. Rental on behalf of the City in 1993 similarly caused vibrations resulting in further cracking. Mrs. Ngo says that when she purchased the properties in 1985 for a total of \$67,000.00 both were in very good condition. She stated there was no cracking on the walls inside or out, the floor was level, the foundation was good and there was no cracking in the concrete floor. It should be noted that 305 Arlington was built in 1929 and 301 in 1938. In 1986 the corporate plaintiff purchased 301 Arlington from Mrs. Ngo and she operated her dental laboratory from there.

#### **THE MAY 1987 INCIDENT**

[4] The claims made with respect to the 1992 and 1993 construction must be viewed in the context of an earlier claim made by Mrs. Ngo and her husband. Mrs. Ngo testified that in 1987 vibrations caused by road repair work carried out by the City on Arlington Street across from 301 Arlington caused a "big bang" and a "big hole" in the stucco wall on the west side of the building and a minor crack. As well, she identified precisely four hairline cracks in the "metal room" and three in the "porcelain room" which she says were caused in the interior. This evidence was directly contrary to the evidence of two City of Winnipeg employees, Keith Richards, a claims adjuster, and David Duncan, a claims officer.

They went to 301 Arlington on June 3, 1987 in response to a complaint that a hole in the wall had been caused by a stone thrown up against the front of the house by a passing vehicle. The photographs taken showed a small hole in the wall and a stone on the ground below it. The photographs also showed cracking on the same exterior wall between two windows as well as from the bottom, and cracking on an interior wall near one of the windows. The statement taken at the time by Mr. Richards from Mrs. Ngo's husband specifically referred to a stone being thrown up against the wall. No mention was made of vibrations from construction work. There was some initial confusion as to whether the vehicle involved was a licensed truck, which would then involve an Autopac claim or an unlicensed construction vehicle in which case the City would be responsible. Although the confusion was cleared up, it was apparent that Mrs. Ngo felt that the City was trying to avoid accepting responsibility causing her to view it and its employees with considerable suspicion and mistrust. This appears to have been part of a larger attempt by her to portray herself as a vulnerable Vietnamese immigrant unfamiliar with the English language and the ways of the world in Canada. However, the evidence painted a different picture and showed her to be a shrewd and sometimes devious businesswoman whose sophistication and command of the language far exceeded that to which she was prepared to admit. It also came out she was no stranger to City Hall.

[5] Mr. Richards attended 301 Arlington again on December 8, 1987 after receiving a call from Mrs. Ngo the day before alleging damage inside 301

Arlington which had not been looked at previously. He re-attended a third time on December 22, 1987 with Mr. Duncan and Don Chrest, a claims adjuster trainee. I accept Mr. Richards' testimony, supported by that of Mr. Duncan, that there was cracking on the inside and outside walls of 301 Arlington in 1987 as well as cracking on the exterior of 305. Although Mr. Richards did not go inside 305 Arlington, it is difficult to imagine that there wasn't similar cracking in the interior given the age of the house, the condition of the outside and no reliable evidence of any repairs being undertaken.

[6] I do not accept Mrs. Ngo's evidence that the aforementioned photographs were not taken by Mr. Richards in 1987 but rather in 1992. No explanation was ever offered by her for the picture of the small hole with a stone nearby which supports his version of events as well as the initial claim made by Mr. and Mrs. Ngo. Mrs. Ngo refused the City's offer of \$150.00 to repair the wall because she wanted to have the entire wall patched and painted. Mr. Ngo, who has since separated from the plaintiff, was not called as a witness.

[7] This incident was the precursor to the subsequent claims that form the basis of the within actions. They are simply a variation on a theme.

### **THE 1992 CLAIM**

[8] The work done on the lane in 1992 was contracted out by the City to Darco Enterprises. Darco did the excavation and removal work and re-poured the concrete but subcontracted the breaking up of the concrete to Joe Holland and his companies, Joe Holland Rentals and Joe Holland Inc. Default judgment

was obtained against these defendants when no defence was filed. Darcy Nynych testified on behalf of Darco. He has been in the concrete, paving and sewer and water business for 25 years and described in some detail the process by which the concrete was cut, broken and hauled away. In 1992 Darco did not break concrete but has since 2000, using a breaker similar to the Stanley MB 156 used by Holland. Nynych testified that Joe Holland and Holland Enterprises were very reputable; that Darco has worked with them hundreds of times as has the City and others; that the methods and equipment used by them in 1992 were standard in the industry and that other work performed by them in the same proximity (4.75 feet from 301 and 23 to 24 feet from 305 according to Mrs. Ngo) on hundreds of jobs have been without any incident or complaint. I accept his evidence which was supported by other testimony and find that there was nothing improper or negligent in the manner in which the work was subcontracted or performed.

[9] The court had the benefit of viewing a videotape of the 1992 construction taken on August 20 and 21 and September 8, 1992 by or on behalf of Mrs. Ngo. Mrs. Ngo spoke repeatedly and physically demonstrated how the "heavy jackhammer" pounded the concrete causing the houses to vibrate and how the backhoe picked up large pieces of concrete and dropped them into the "heavy loading truck" causing it to bounce many times. She said this caused the houses to shake so badly it was about five times stronger than the vibrations she alleged in 1987 and was "like an earthquake". This was not borne out by any other

evidence and even Mrs. Ngo's expert agreed that the loading of the concrete into the truck wouldn't cause the kind of damage she described.

[10] David Duncan testified that on September 22, 1992 he inspected the property at 301 Arlington in response to Mrs. Ngo's complaint that vibrations from the lane construction had caused cracking. He found 301 Arlington to be essentially in the same state as it had been before, although perhaps a little more cracked. On November 4, 1992 he inspected 305 Arlington in response to Mrs. Ngo's complaint that the construction vibration had caused the stucco on the garage to crack. Although not an expert, based on his considerable years of experience it was his opinion that vibrations did not cause the cracking but that the cracking at 301 may have been caused by differential movement between the interior and exterior footings and the cracking on the stucco garage at 305 could have been due to temperature changes or the stucco not having been cured properly when it was first put on.

[11] In the video Mrs. Ngo pointed out every crack in every room in 301 Arlington involving 22 interior walls and all exterior walls. Oddly, although she complained about cracking in the concrete basement floor of 301 and that the floor began sinking about one month later, she never videotaped in the basement. Given her concern with cracking in the properties, her explanation that she didn't think it was important to videotape the basement was unconvincing. She realized this in cross-examination and offered four other explanations as to why she only videotaped upstairs, none of which were

credible. She vehemently denied not taking pictures of the basement because there was no damage which appears to have been a more likely reason.

[12] She found herself in further difficulty with respect to her allegations when it came out that in her written complaint to the City dated September 9, 1992 with respect to 301 and 305 she stated "There were no cracks on the inside or outside walls before the lane construction". Clearly this was not true. It also appears obvious that it was because of this glaring contradiction in the face of the 1987 photographs taken by Mr. Richards that she claimed he lied and took the photos in 1992. Neither was there any satisfactory explanation given as to why the repair estimates she received dated June 8, 1987 referred to the owner claiming there were several cracks in the interior walls. Her evidence was rife with similar contradictions and inconsistencies throughout the trial.

[13] Mrs. Ngo produced dozens of photographs ostensibly to show the difference in the condition of various walls prior to the 1992 construction and after the 1993 construction. She also purported to be able to point to each crack and say when it occurred. The unreliability of this evidence was best demonstrated when it became obvious one photograph could not possibly have been taken when she said it was, because her youngest son would have been only a baby and he was clearly several years older in the picture. Another example was when, defying any common sense, she insisted that a City inspector came to her house and took one picture of one wall of 305 Arlington in



the winter prior to June 1992 when all the other pictures were taken at a later date.

[14] These examples and others compel the conclusion that her evidence must be regarded as essentially unreliable. Neither was Mrs. Ngo's credibility helped by the three witnesses called to speak to her character and their recollection of the condition of the properties. They were members of the church congregation that had sponsored her and her family to Canada and from whom she rented the properties before buying them. Edwin Teichrow candidly admitted that he could not comment on the condition of either 301 or 305 after 1985 since he only saw them in August 2003, over 10 years after the damage allegedly occurred.

[15] Jacob Klassen installed kitchen cabinets at 301 Arlington in the mid-1980's and did speak about the condition of that property but it was apparent that his friendship with Mrs. Ngo affected his objectivity. For example, when he was shown the pictures taken by Mr. Richards in 1987 he was very reluctant to acknowledge they evidenced cracking. Although he acknowledged there were some cracks in one photograph, when shown others with obvious cracks he declined to comment; in another he purported not to be able to see any cracks; in another he thought an obvious crack was an icicle; and with respect to another suggested it was a condensation problem. Coupled with the passage of 20 years since he was in the properties, I place little reliance on his evidence. Similarly, I did not find the evidence of Nick Unrau particularly helpful. Mr. Unrau is Mr. Klassen's brother-in-law and was also a real estate agent with

whom Mrs. Ngo had a business relationship. On cross-examination it came out that he receives a commission from Mrs. Ngo for business referrals he makes to her and it appeared his evidence was coloured by his direct economic interests. Although all three testified that Mrs. Ngo had been a responsible tenant and good businesswoman, it was obvious there is another side to Mrs. Ngo of which they are unaware. Their testimony as to her integrity and character was also completely at odds with her conduct in the courtroom. This was marked by evasiveness on the stand, a selective memory, glaring contradictions in her evidence compared to other reliable evidence and obvious attempts to mislead the court. Perhaps the worst example was when she was caught in an apparent attempt to surreptitiously record the proceedings possibly including confidential discussions among counsel when court was recessed.

### **THE 1993 CLAIM**

[16] Joe Catral, the owner of C.J. Rentals, testified that in 1993 the City contracted with his company to repair the joints on a number of streets including Arlington between Portage and St. Matthews Avenues. He described in some detail the process used to cut the concrete and break it up with a hydraulic breaker mounted on a drotte. He testified he used the same type and model of breaker as the Stanley MB 156 used in 1992, with the same specifications, and that this was commonly used then for that type of work. He also testified that the hydraulic breaker operated at maximum efficiency at all times. This accorded with the evidence of the other witnesses except Mrs. Ngo's expert,

Professor El Naggar. Joe Catral stated there was no comparison between the hydraulic breaker that was used and a drop hammer and confirmed that the pictures taken by Mrs. Ngo accurately depicted the work done. He also explained that because the concrete had deteriorated underneath it was impossible to cut the steel rebar in some places which was why it had to be lifted and twisted before being loaded into the truck. He also observed that in his 32 years in the construction industry doing heavy road repairs for the City of Winnipeg he had received no complaints other than from Mrs. Ngo, echoing the observations of Darcy Nynych regarding the 1992 work.

[17] Mrs. Ngo alleged that the 1993 work caused vibrations resulting in further damage to 301 and 305 Arlington. She was specifically concerned about the sinking of the basement in 301. She also testified that the construction work caused damage to new drywall and vinyl siding at 305 which had been installed approximately one year before although this aspect of the claim was not pursued. She said that the work was performed 20.9 feet from 301 Arlington and 37 feet from 305 Arlington.

[18] In response to Mrs. Ngo's complaint, Keith Richards attended to the properties on December 1, 1993 and instructed a trainee adjuster with him to take photographs. In the basement of 301 he observed water staining, upward heaving and cracking in the concrete and that a partition wall had no room for expansion. On December 13, 1993 he re-attended with Dave Duncan to document the cracking at 301 and 305 which he acknowledged was more severe

than it had been in 1987. His conclusion which is found in his January 19, 1994 notes was "It is my opinion that the damage at 301/305 Arlington was not caused by street construction, sidewalk construction, lane construction or vibrations from traffic. The condition of the building at 301 is essentially the same as on previous visits."

[19] Duncan admitted that he had not been in 301 previously and he also acknowledged it was possible for cracks to grow over time.

[20] Mr. Duncan also gave evidence about "peak particle velocity", "sign waves" and the "threshold of damage" in relation to a study that was carried out in Winnipeg in 1968 which measured vibrations from various sources including construction. This was the R.H. Ferahian and W.D. Hurst report "Vibration and Possible Building Damage Due to Operation of Construction Equipment" referred to throughout the trial along with a report on vibration study by the National Testing Laboratories Limited dated December 20, 1990. At the time of the 1968 report a drop hammer was used to break pavement. That study showed that a full drop of 10 feet equalling 11,000 foot pounds was not sufficient to damage a building 3½ feet away. Duncan noted that the Stanley breaker used in the 1992 and 1993 construction work which he described as a "small breaker" has 175 foot pounds and produces 20 hertz a minute. Although he expressed the view that the peak particle velocity of a Stanley breaker was definitely not enough to damage the buildings in question, he admitted that he was not an expert in the area. However, his job with the City was to write opinion reports with respect to

the cause of the damages complained of and he was clear that the cracking was not due to the construction.

[21] Mrs. Ngo's explanation with respect to this evidence was again that the City employees and inspectors were lying and only wished to save the City money.

### **CONFLICT OF EXPERTS**

[22] The evidence of Professor Mohamed Hesham El Naggar, the expert who testified on behalf of the plaintiff, was in direct conflict with that of Doug Stewart and Alv O. Dyregrov who were called on behalf of the defendants. Professor El Naggar is currently Associate Dean at the University of Western Ontario, Department of Civil and Environmental Engineering, and has impressive credentials. It was his opinion that the damage to 301 and 305 Arlington was caused by vibrations due to the construction. He disagreed with the evidence of all of the other witnesses that the damage was caused by soil movement and stated that the pattern of cracking was consistent with damage caused by vibration. He described the phenomenon of "amplification" whereby a vibration from a source that has a frequency equal to a structure's natural frequency will result in more damage to the structure. He also described how vibration levels increase as they move up a wall and are therefore stronger than when measured at the foundation.

[23] Professor El Naggar was disadvantaged in a number of ways. He did not inspect the properties until February 25, 2004, some 10 to 12 years after the

damage allegedly occurred. He admitted that it is difficult to ascertain the cause of cracking due to construction vibrations unless a pre and post inspection can be done which was not the case here. In the result he had to rely on information and photographs provided by Mrs. Ngo which were incomplete. For example, he was unaware that Mrs. Ngo had alleged that in 1987 vibrations from the impact of a stone had caused the interior of 301 Arlington to crack which was contrary to her initial complaint to the City. More significantly, he was unaware of the existence of the video of the 1992 construction work and had never seen it when he testified. Professor El Naggar also admitted in cross-examination that cracking can be caused in a number of ways, including thermal expansion, structural overloading, chemical changes, shrinking and swelling of wood and soil movement. Unlike the defendants' experts, he acknowledged having no experience with the kind of damage caused by soil movement experienced by many Winnipeg residents whose homes are built on heavy clay soil, the infamous Red River gumbo.

[24] There were other aspects to Professor El Naggar's testimony which made it less than persuasive than that of the other experts. For example, he disagreed that the Stanley MB 156 breaker always operates at 20 hertz saying it ran at different speeds. This was in contradiction not only to the evidence of other experts but also to those who operated this type of machinery. With respect to the 1992 construction, the only calculation he performed was at a distance of 4.75 feet such that his calculation didn't apply to any other distance. He insisted

that a drop hammer did not produce more vibrations than an hydraulic breaker, contrary to all of the other evidence on point. He also testified that a house can suffer damage if the peak particle velocity is as low as .08" per second although he agreed that this was not the generally accepted threshold of damage which is 3" per second, more than that resulting from the Stanley breaker. He also had to acknowledge that the Langfores, Northwood and U.S. Bureau of Mines were reputable authorities and that there is general agreement that up to 2" of peak particle velocity is safe and not until one reaches 4" per second will even minor structural damage result. Most significantly, Professor El Naggar agreed that his opinion as to the cause of the damage would be affected if there had been more damage between 1992 or 1993 and 2004 than he had been led to believe by Mrs. Ngo. And he agreed that if one could take the same concrete, the same equipment, the same distance for similarly aged structures (for example 50 houses) and break it up and there was no observable damage to any other houses or foundations it would show a problem with his conclusion. Since there were no other complaints from any of the other homeowners along Arlington or elsewhere, in doing so he effectively acknowledged his conclusion was likely not valid.

[25] For all of these reasons I prefer the evidence of Doug Stewart, a Structural Engineer and Senior Vice-President of Wardrop and Alv Dyregrov, a Geotechnical Engineer. Both have considerable years of experience in Winnipeg and testified that the cracking complained of was due to soil movement and the

fact that the teleposts in the basement of 301 were never adjusted. As succinctly stated by Mr. Dyregrov, "The cracking pattern is consistent with everything I've seen in the past 40 years in both residential and commercial buildings. There is no reason to think it is any different here."

### **CONCLUSION**

[26] Near the end of the defendants' case it was apparent that the plaintiff had failed to show that the cracking at 301 or 305 Arlington was caused by the 1992 or 1993 construction. Seeing the writing on the wall, Mrs. Ngo fired her lawyer, who had ably represented her throughout the proceedings under trying circumstances. Her request for an adjournment was denied. Her attempts to introduce "new evidence" met with similar success. It was therefore left to Mrs. Ngo to deliver argument on behalf of the plaintiff and she was given some time to prepare.

[27] The evidence was overwhelming that any damage to the properties was not as a result of vibrations caused by the construction and road repairs in 1992 or 1993 but was due to the expansion and shrinkage of the soil over time. In light of this and given the lack of evidence (including no evidence with respect to the loss of rent), in my view no useful purpose would be served in undertaking the complicated task of calculating the quantum of damages had I found otherwise. There is no evidence on which to find that the work wasn't contracted for and carried out as it should have been. Similarly, it is unnecessary to consider any of the other issues raised including other defences,



whether there was contributory negligence on the part of Mrs. Ngo or indeed the applicable law. The absence of any causal connection between the work performed and the damage alleged sufficiently disposes of all claims in their entirety. Accordingly, the plaintiffs' claims in both actions are dismissed. The parties may speak to the issue of costs if they are unable to agree.

W. J. McLawley J.